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ART. I.—*Notes on Medical Matters and Medical Men in Paris.* By DAVID W. YANDELL, M.D., of Louisville, Ky.

LECTURE ON THE DISEASES OF THE GENITAL ORGANS OF THE FEMALE.

Delivered at Lourcine Hospital, by M. HUGIER.

Catarrh of the Uterus.—The disease of which we propose to speak this morning has been the object of our special attention. After long researches, we think we have arrived at results calculated to clear up certain hitherto obscure points relative to the history of catarrh of the uterus. If we consult the authors who have written upon the subject which occupies us, we find them vague, and not unfrequently guilty of errors which are not in all instances without importance. For example, catarrh of the uterus is generally regarded as the consequence of an acute or chronic inflammation—an affection of the internal membrane of this organ—and to this

affection various species of discharges are often attributed, when in reality they have an entirely different origin. In our opinion, the word catarrh is not applicable to a disease of the lining membrane of the body of the uterus, but is clearly and distinctly an affection seated in certain points of the neck, or, in other words, in the follicles of this organ. We consider the discharge proper to catarrh of the uterus a peculiar liquid, very distinct from other kinds of discharges. This liquid is thready, thick, viscid, consistent, of an albuminous or vitreous aspect, and endowed with alkaline properties.

Before entering directly into our subject, allow us to offer you some considerations upon the various discharges which proceed from the genital organs of the female. These preliminaries will be of service to you; they will aid you in understanding the history of uterine catarrh, and will especially render more easy of appreciation the characters which are proper to discharges symptomatic of this affection; for there are many discharges which have been frequently regarded as belonging to catarrh which are entirely foreign to it, and which are vaguely designated under the names of fluor albus, leucorrhea, blennorrhagia, etc. This want of exactness, this confusion in language, is not without inconvenience; it denotes a defect of observation injurious in its therapeutical consequences. In order properly to appreciate the value of discharges in general, we will examine them one by one as regards their seat, and to do so we will divide them as follows:

1. *Vulvar discharges.*—These proceed from the mucous membrane of the major and minor labia, clitoris, and constrictor vaginæ. The liquid which constitutes them may be more or less abundant, thick or aqueous, white or greenish white, mucous or purulent; it is ordinarily acid. This kind of discharge arises either from a local inflammatory or atonic state, simple or blennorrhagic.

2. To these discharges we will add those which are the product of the secretion of the vulvo-vaginal glands, and which may be more or less abundant, simply mucous or purulent;

but in these various cases the liquids never offer the properties which characterize the discharges of uterine catarrh.

3. *Urethral discharges.*—A simple or specific urethritis may furnish, by the orifice of the urethra, a more or less copious, thick, mucous, purulent, or muco-purulent discharge, but never similar to the liquid secreted by the follicular apparatus of the cervix uteri.

4. *Vaginal discharges.*—The same remark is applicable to the fluids secreted by the mucous membrane of the vagina. In fact, the vaginal discharges—the nature of which varies in other respects, and which recognise as their cause an inflammatory or virulent affection, or even an atonic state of the vagina, as that which obtains in veritable leucorrhea—these discharges, we say, never present that transparent albuminous aspect, that viscid, thready, elastic character, and, finally, that alkaline property, which we constantly find in catarrh of the uterus. It may indeed happen that these vaginal discharges may offer characters similar to those possessed by the liquids of catarrh; but in this case it arises from a mixture of two liquids, the one coming from the mucous membrane of the vagina, the other from the seat of the affection which occupies us, that is to say, from the follicles of the cervix; so that if it were possible to separate the different products, we should find the characters proper to each; consequently it follows that this is but a coincidence or complication of two affections, which are not, however, the less distinct the one from the other.

5. *Uterine discharges.*—We are now arrived at the essential point of the question. It does not suffice to have studied the discharges which do not arise from the uterus in order to believe that we now only have to do with those that are proper to uterine catarrh; for this is knowledge which does not furnish all the elements necessary to our diagnosis. We must push our investigations still farther, and in doing this we will establish an important distinction between that which concerns the uterus, and the products of secretion.

We must consider the uterus as divided into two parts, the

neck and body. This distinction, besides being true as regards its configuration taken as a whole, is not the less true as regards its anatomical structure; with this difference, as we will see further on, the existence of distinct physiological and pathological phenomena of great importance. In fact, the body and neck of the uterus are distinct in their functions and diseases, the liquids secreted by the neck differing from those which are produced by the internal membrane of the body. It is not this which offers the anatomical seat of the discharge which constitutes uterine catarrh, while it is the neck which is the secreting organ of this fluid.

Let us now carefully study the anatomical and physiological differences which distinguish the two constituent parts of the organ of gestation, in order more satisfactorily to appreciate the pathological phenomena.

The surface of the neck offers numerous folds, which are intended to facilitate its dilatation during labor; the internal surface of the body is, on the contrary, smooth, polished, and in nowise wrinkled. When this organ, as obtains in pregnancy, augments in volume, its expansion is neither instantaneous nor on the other hand passive; it is effected in consequence of a movement of general nutrition, gradually and insensibly.

If we examine the interior of the cavity of the neck, we ordinarily find a variable quantity of mucous matter, transparent, viscid, and thready between the fingers. The cavity of the body offers nothing similar; the liquid which it may contain is more or less thick and serous, never resembling that of the neck. It is in the cavity of this organ, and upon certain points of the surface of the vagina, that we often perceive a number of mucous follicles, called *glandulæ nabothi*, shut follicles, charged with secreting the thick, thready, gelatinous mucus of which we have just spoken. But these little glandular bodies never show themselves in the cavity of the body; and even if placed there, what end could they serve? Would not their presence be useless, or even hurtful? Would not the follicular liquid secreted by them in the cavity of the body

often offer an obstacle to fecundation? and would it not favor the escape of the ovum, and render its exit easy? Placed, on the contrary, in the cavity of the neck, secreted, perhaps, more abundantly after the act of conception, the follicular mucus obstructing and obliterating the cavity of the neck, facilitates the engrafting of the ovum, which is thus prevented from passing out. The obliteration in the mode of which we are speaking may take place to such an extent as to prove, in certain cases, a true cause of sterility, by opposing itself to the penetration of the spermatic fluid during the act of copulation.

The follicular liquid shows itself useful again during labor. In moistening the cavity of the neck, it favors its dilatation, facilitates the passage of the head of the child, and consequently renders the woman less liable to those more or less serious lacerations to which she is sometimes exposed. But whatever may be the physiological value of the liquid and of the follicular organ, it is certain that the secretory apparatus of which we have spoken exists only in the neck; in our numerous researches we have never been able to detect its presence in the cavity of the uterus. Without doubt, products of secretion do exist in this cavity, but these products, whatever they may be, always differ from the liquids furnished by the follicles of the neck. One does not see, we repeat it, upon the internal membrane of the body of the uterus anything similar to the mucous follicles presented by the neck. The small glandlike bodies that are found there are nothing more than ramifying submucous canals, and the glands pointed out by Weber are themselves but the products of the membrana decidua, and consequently do not properly belong to the uterus. In fact, what is the internal membrane of this organ? What is the general opinion of anatomists concerning it? Now, it is evident that if the greater part of them contest the existence of a mucous membrane lining the cavity of the uterus, they do not hesitate to admit it for the cavity of the neck; such is the opinion of Heister, Méry, Azaguidi, Morgagni, Ribes, Chaussier, Dugès, and Madame Boivin, whose works and manner of viewing the question are of great value.

These authors assimilate the uterine membrane to the serous membrane of the heart, and do not recognise a mucous membrane except upon the point of insertion of the placenta. P. Dubois and Cruveilhier, it is true, believe in the existence of a true mucous uterine membrane; but we must observe that these authors base their opinion only upon analogies, and in no instance upon anatomical demonstration. For ourselves, we will say, relative to the question, that the cavity of the body of the uterus is lined by a mucous membrane, but that this membrane does not exist except in a rudimentary state, while the internal membrane of the neck offers all the elements which characterize a complete mucous membrane.

The same anatomists that we have mentioned, Nabothi himself, and, very recently, Martin-Saint-Ange and Grimaud, describing the follicles in question, recognise their existence only in the neck, never having seen them elsewhere. Certain special observations come still to the support of this view. It is thus that Morgagni, Dugès and Madame Boivin and many other anatomists, having had occasion to examine the uterus in women who died during the period of menstruation, have signalized as very sensible, and more or less voluminous, the follicular bodies of which we speak; but they have remarked their existence only in the neck, never in the body.

These, now, are circumstances which would have revealed similar follicles in the cavity of the body if they had really existed there. Moreover, the liquid secreted by the internal membrane of the uterus, which constitutes what is sometimes called the false waters, resembles in appearance peritoneal serum, but is never thick, thready, albuminous—in a word, similar to the mucus secreted by the follicles. The same remark is applicable to the nature of the purely aqueous liquids that we see discharged in an intermittent manner in certain cases of insertion of the placenta into the neck. If we examine, moreover, that which occurs in obliteration of the cavity of the uterine neck, the observation again confirms our opinion. In effect, when it is the inferior orifice which is obliterated, we find in the uterine cavity an aqueous liquid mixed

with another fluid which is mucous, thready, transparent. On the contrary, in cases of obliteration of the superior orifice, no similar mixture is found; the liquid which exists then in the cavity of the body preserves its ordinary characters; it is aqueous, serous, never viscid, thready or albuminous, and in no respect resembles the fluid contained in the neck. We will add, that whatever may be the lesions of the uterus, the cavity of this organ has never shown us liquids analogous to those which result from the secretion of the follicles, and of the characters of which you may gain an extremely good idea from those patients laboring under catarrh of the uterus, which we shall show you after our lecture.

To terminate our rapid glance at the various secretions furnished by the genital organs of the female, which you must not confound with the discharge proper to the disease which occupies us, we should mention the secretion from the internal membrane of the uterus—discharges symptomatic of various affections of this organ; we should indicate, finally, the liquids secreted by the appendages of the uterus, the Fallopian tubes, attendant upon the numerous affections of which these organs are susceptible, hypersecretion, dropsies, cysts, etc. But in these various cases the discharges differ essentially from the products of the secretion of the follicles of the neck, and cannot be confounded with them.

To recapitulate: the genital organs of the female give place to discharges which, viewed as regards their seat, may be divided as follows: 1st, vulvar discharges; 2d, discharges coming from the vulvo-vaginal secretory apparatus; 3d, urethral; 4th, vaginal; 5th, uterine, which may themselves be subdivided into those which proceed from the neck, and those which are furnished by the body; and, 6th, discharges originating in the appendages to the uterus. Now, of all these various discharges, those only belong to the affection designated *catarrh of the uterus* which offer the characters that we have indicated, and which are seated solely in the follicular apparatus of the neck. It is then the neck—its follicles—that we should regard as the true seat of the disease which now engages us.

The different considerations which we have presented will assist you in understanding certain points relative to the history of the disease, so that we may now say something of its etiology. Catarrh of the uterus is observed principally in young women who abuse sexual pleasures, in those of a lymphatic temperament, with soft red hair, or in those who have no other mark of the *brune* than the color of their hair. Cold and moist climates also predispose to this affection. Masturbation, excessive coition and pregnancy are not without influence in the production of uterine catarrh; but it sometimes happens, when it depends upon pregnancy, that it disappears after delivery, and is consequently but a transient affection. There are besides many diseases that should be regarded as predisposing causes, and especially slow, chronic inflammation of the uterus, which determines in this organ irritative fluxionary movements, and consequently a hypersecretion of the follicular apparatus.

Certain vices of the humors—a scrofulous affection, for example—being capable of deteriorating the female economy—of developing in it a sort of mucous constitution—may create and sustain a catarrh to which the name of scrofulous catarrh might be given. We will make the same remark of blennorrhagic and syphilitic diseases, the morbid product of which may have attained the follicles of the neck, and there given rise to a virulent catarrhal hypersecretion. It sometimes occurs, in cases of this nature, that the specific cause being removed, the catarrhal affection dependent upon it also disappears, though this, on the other hand, may continue after the removal of the cause. The etiological causes which we have just enumerated being established, we will return again to the product of the secretion of the follicular apparatus—a product whose importance we should bear in mind, as being the essential element of the disease.

The follicles which furnish the liquid proper to catarrh of the uterus are seated, as we have already remarked, at the neck. In the cavity of this part of the organ they are less numerous towards its orifice than upon its middle portion;

they are also found disseminated on the extra-uterine surface of the cervix, and these consequently being, like the first, susceptible of disease, may in this case give rise to a form of catarrh which might very properly be designated by the term of extra-uterine catarrh. Of these follicles, some are superficial, that is to say, placed under the mucous membrane, while others are deep, situated in the substance even of the walls of the neck, at a line and even two lines in depth in the proper tissue of the uterus. The glandular corpuscles of which we have spoken, irritated and inflamed, have often been described under the vague name of granular metritis, without the writers knowing to what anatomical lesion it was to be attributed.

Let us now establish an important distinction between the normal or physiological, and the pathological products of these follicles. We will first remark, that there exists in them normally a certain quantity of mucus, secreted by the follicles in the cavity of the neck; but in the physiological condition of the organ, the mucus is always transparent, resembling very much a vitreous body. When this liquid is secreted a little more abundantly than ordinary, it may escape by the vagina, and cause certain women to think that they are laboring under fluor albus. In cases of this sort there exists but a simple hypersecretion of the follicles, that is, a state bordering upon catarrh properly so called. It manifests itself without redness, inflammation or tumefaction of the neck of the uterus; it is met with principally in women who have had several children, or in those whose uterus has become the seat of an active hyperæmia. To establish, then, the existence of a catarrh, it is not only necessary that there be an augmentation in the liquid secreted, but also that it present either an opaque, a dull white, or a purulent aspect. This is its differential character.

Let us now examine this morbid product as regards its contagious properties:

1. *Physical Characters.*—The liquid may be observed at the vulva, in the vagina, and at the neck. When examined at the vulva, we see at its orifice a flake of thick, elastic, thready matter, which is detached with difficulty, unctuous to

the touch, and therefore slightly sensible to the finger. In some cases the neck seems swollen, dilated like a bubble. To the touch the neck appears then supple and pulpy, as if it were softened; and if you attempt by the aid of the forceps to evacuate the liquid, it becomes detached and flows in greater abundance than you would have believed, and, the walls of the neck collapsing, it appears to be emptied. When you apply the speculum—and this is useful—you must use that with two valves, by means of which, after having placed it properly and seized the neck between the two gutters formed by the valves of the instrument, you may make repeated pressure, and cause to flow abundantly, and almost in a jet, the liquid contained in the cavity of the organ and in the sacs of the mucous follicles. The quantity of the mucus contained in the neck may be considerable, and may give rise to what M. Jobert calls dropsy of the neck, which in our opinion is but a form of catarrh. In effect, the liquid is simply accumulated in the cavity of the neck, and not contained in a closed and distinct sac.

In certain cases, the mucus secreted by the follicles of the cavity of the uterus is in communication with the liquid of the same nature furnished by the follicles situated on the surface of this organ which is in contact with the vaginal walls, and gives rise to more or less considerable masses of fluid. Whatever may be the point of the vagina where this deposit takes place, it is easy to see that the matter which constitutes it is not the product of the mucous membrane of the vagina, but rather of the glandular apparatus of which we have spoken. In fact, we always find a stream of liquid which is directed towards the neck, the place of its origin; and it is thus that the mass of the liquid has glided to the vulvar opening. It sometimes happens that, in consequence simply of the vertical position, the mass of liquid becomes suddenly detached and falls to the ground. It is not in this way that the discharges in disorders of a different character are effected; in these, the escape of the fluid is never in a body or mass, but slowly, and drop by drop.

Let us now say something on the appearance presented by the mucus of uterine catarrh deposited upon the linen. The stains which this liquid forms upon the linen are quite round, and not angular as is the case in those formed by discharges from the vagina; they glue the linen, rendering it firm as if starched; their color is a dull white, grayish, or greenish yellow. It is important to be able clearly to distinguish these taches or spots. In the first place, it may be of some importance in a medico-legal investigation; then it may happen that you will meet with certain women who will not allow any examination whatever of their genital organs, and you are thus obliged to put up with an examination of their linen; and these, too, are difficulties which you must expect to meet but too often in practice.

2. *Chemical Characters.*—If we look for a moment at the chemical properties of the liquid of which we are speaking, we shall see that it offers characters peculiar to itself. This liquid, in fact, is alkaline; it may sometimes show itself acid, but this is then owing to its mixture with the products of a secretion of a different nature and source; so that if it were possible to separate and analyze apart the liquids mixed togegether, that dependent upon catarrh of the uterus would always present an alkaline character. When you collect and set aside this liquid to dry, it becomes solid, brittle, elastic; put it in water, where it does not dissolve, it regains all the characters by which it was recognised in the liquid state. The matter of discharges from the genital organs, other than that belonging to catarrh, does not present the same chemical and physical characters as the latter. Thus we find among them some differential characters which are of no mean value.

3. *Contagious Properties.*—We proceed to add to the foregoing some brief considerations upon the contagious properties of the liquid produced by uterine catarrh, which is a question not altogether devoid of interest. Catarrh of the uterus is evidently contagious when the consequence of or when accompanied by, a syphilitic disease; it may be contagious when it is simply blennorrhagic, without being syphilitic. When blen-

norrhagic catarrh has continued a certain length of time, it may lose its contagious properties, as you are aware, in urethral blennorrhagia.

A urethritis in a man may be the consequence of sexual connection with a woman laboring under a simple non-blennorrhagic catarrh. It is not very rare to see in the same woman a catarrh showing itself contagious at certain times, and not constantly. This may be owing to certain transient modifications produced in the matter of the discharges in certain women placed accidentally in diverse conditions, and inappreciable circumstances. It is thus that excess in coition, menstruation, fatigue, and other causes, may develop a principle of acidity in the product of the catarrhal secretion, and give to it contagious properties; these transient causes subsiding, the effects subside also, and the woman becomes exempt from all contagious qualities. Nor is it unexampled for women, laboring under uterine catarrh, to fail to communicate disease to the men with whom they have habitual intercourse, and yet produce a blennorrhagia in those who have had with them but occasional connections. It is important to be aware of facts such as these; their explanation is perhaps difficult, but their existence is not the less incontrovertible, and this should suffice us.

March and Duration.—Catarrh of the uterus maintains a continued march; no intermissions mark its progress. Nevertheless menstruation exercises an appreciable influence upon this affection. In effect, two or three days before the menses appear, the catarrh is often seen to diminish, then to be suspended, and suppressed during their continuance, to reappear after their cessation, and resume its continued march; it acquires sometimes a greater intensity after the menses, though this is but a momentary result.

Catarrh of the uterus may present itself under two forms—acute and chronic. In the first case, it may terminate at the end of a month or a month and a half. But the chronic form is the most frequent, and the disease then may last for many months or years, and even during the whole of the period of

life in which the woman is susceptible of fecundation, it rarely continuing after the final cessation of the menstrual discharge.

Symptoms.—When the catarrh is chronic, essential, and not complicated, it gives rise only to unimportant functional troubles. There is remarked a vague general uneasiness, some sensations of twitching in the groin, in the vagina, in the interior of the womb; sometimes indigestion; a little loathing, sadness, etc.; and some complications may also occur. Thus there exists sometimes an inflammatory condition of the parts, of the neck itself, the surface of which may be red, bleeding, and deprived of epithelium, and flabby and fungous around the follicles. The orifice of these follicles may be enlarged and ulcerated. The reactional troubles will be more or less marked according to the complications, they being in fact in a ratio with the nature and degree of intensity of the phenomena of complication.

Diagnosis.—We have seen what are the characters proper to discharges of catarrh of the uterus; we find these the essential element of the diagnosis of the affection. But you must not neglect to inquire if the disease is simple; if it is owing to a local or general cause; if it is connected or not with an affection of the tissue of the neck or of the body of the uterus; if it is the consequence of a lymphatic temperament, of an anemic state, of a scrofulous taint, etc.—circumstances all calculated to furnish essential therapeutic indications.

Acute Pleurisy. Thoracentesis.—Although acute pleurisy is not ordinarily an extremely grave disease, there are cases where the termination is fatal. Respecting these terminations M. Trousseau has the following interesting remarks:

1. Acute pleurisy may kill by the excess of effused liquid. 2. It may kill as a phlegmasia, independently of the quantity of the effusion. 3. In the same individual there may be an excess of effusion capable of killing independently of the reactional influence of the phlegmasia, and a phlegmasia capable of producing death independently of the excess of effusion.

Struck with the manner in which acute pleurisy may become fatal in the first category, M. Trousseau demanded if, in these circumstances, it would not be possible to evacuate the liquid by means of a surgical operation, as is sometimes done in chronic pleurisy. In 1843 he acted upon this thought, and had the good fortune to succeed. In 1844 he twice repeated the operation; in 1845 he again performed it; and in a memoir published in the *Journal de Médecine*, he has based upon the three propositions above given the three following therapeutic conclusions: 1. In the first case, paracentesis of the thorax is a powerful means, exempt from danger. 2. In the second case, thoracentesis is at least hurtful. 3. In the third, it is useful, as it certainly prolongs life, and thus opens up some chance to the patient.

M. Trousseau, we see in this, does not recommend thoracentesis as a common operation, to be performed daily, like venesection, cupping and blistering, but as an exceptional method which is only applicable in certain rare cases. This operation of thoracentesis in a case of acute pleurisy was performed by M. Cullerier a few weeks ago in one of the wards at the Hotel Dieu, in which I was taking one of my private courses. A recapitulation of the case may be interesting:

A short time since a man forty-three years of age entered the hospital, laboring under a simple acute pleurisy. A bleeding at the arm and two blisters effected a notable amelioration of the symptoms and considerable diminution of the effusion. Suddenly, without any known cause—probably in consequence of some imprudence of the patient—the inflammation appeared with increased intensity; the chest filled anew; stitch in the side, and intense febrile action. Cups were applied, followed by four successive vesicatories, and purgatives. Notwithstanding these energetic means, the effusion, far from diminishing, seemed to augment; the dyspnœa was greater; the fever alone had abated. The patient, although he had here evidently been attacked with an acute inflammation of the pleura, was, as far as his general condition was concerned, in the same state as if he had been attacked with chronic

pleurisy. He was in the following condition when the operation was performed: The right side was enormously dilated; in the inferior half of the chest there was œdema of the soft parts of the walls of the thorax; dullness throughout the whole of the right side. The liver was manifestly pushed back into the iliac fossa, and percussion gave an obscure sound until about two inches above the crural arch. Slight œdema of the right thigh; extreme dyspnœa; respiration very rapid; scarcely any febrile movement.

M. Cullerier commenced the operation by making with a bistoury an oblique incision of the skin, which comprehended also the muscles, from above downwards and from behind forwards, in the direction of the intercostal space, between the eighth and ninth ribs. Arrived upon the pleura, the surgeon penetrated into the thoracic cavity with a trocar, introduced at the inferior angle of the wound. The first quart of liquid evacuated consisted of a yellowish serum, a little turbid, resembling in color urine slightly changed. The patient having now changed his position, the liquid which flowed by the canula changed its nature, and of ten pounds, which was about the amount of the effused fluid, three-quarters at least were composed of almost pure pus. The operation was barely completed when the liver returned to its normal position. The day of the operation and during the whole of the next, pus escaped by the opening made in the walls of the thorax. M. Cullerier carefully introduced, on the second day, a sound into the wound; this maneuver gave issue to more than a quart of sero-purulent liquid. A blister was applied upon the diseased side, with the view of creating an obstacle to the production of any new serum. It is now eight days since the operation, and, save a slight access of fever that arose on the fourth day, everything has gone on well.

It is evident that thoracentesis must remain an exceptional method, and that its indications are in nowise so common as those of the other means that are daily employed against acute pleurisy. M. Trousseau has expressed, in a few lines, the indications which warrant it: "When the dullness shall

be perceived in front and above, and shall have attained the median line from the sternal curve to the fourth rib, and the diaphragm shall have attained its greatest degree of depression, it will be desirable to make the puncture, although there may be no urgent necessity. But if, notwithstanding the activity of the means employed, the dullness shall pass beyond the median line, and continues each day to extend towards the opposite side to the extent of four or five millimetres, there is urgent necessity for puncture; and it is still more pressing if the effusion is on the left side. And when the effusion has not passed the median line, if the orthopnœa is extreme, the pulse small and very frequent, the face excessively anxious, especially if there is a tendency to lypothymia, it is also necessary to operate as soon as possible."

An opinion generally accredited among physicians is, that the pneumonia which supervenes during the course of pulmonary phthisis is always or almost always mortal. What has probably contributed to extend this opinion is, that in a great number of persons who have died of phthisis, there are found at the autopsy some equivocal traces of acute inflammation of the pulmonary parenchyma. But a distinction should be established between the pneumonia which supervenes in the last period of pulmonary phthisis, and that which is observed often during the first periods of the evolution of tubercles. And in this last case, it is still necessary to distinguish between the tuberculous pneumonia of the child and that of the adult. In the child it is always mortal; already very grave in itself, the pneumonia seems to be a spur which imparts a more rapid march to tuberculization. In a very little time, the symptoms become intensely acute, and death occurs almost immediately. In the adult, it is far from being the same. The phlegmasia of the pulmonary parenchyma is quite common at an early period of the tuberculous disease; and in this case it is remarkable that it possesses but little gravity, and that it most frequently terminates in a favorable manner. Extraordinary as it may appear, the fact is not the less certain, the observations of Louis, Andral and Grisolle having put it beyond a

doubt. The last named gentleman, who has published the most complete treatise on pneumonia extant, has proved, moreover, that the pneumonia which supervenes at an early period of phthisis does not appear to aggravate, at least as a general rule, the first disease—a proposition which M. Louis, since the publication of his work on phthisis, has recognised as correct. Most physicians have had more than one opportunity of verifying the almost perfect harmlessness, or at least comparatively slight gravity, of pneumonia supervening among subjects manifestly attacked with tubercles in a slightly advanced state. A few days since there was a case of this kind in the wards of M. Louis at the Hotel Dieu. The explanation which he gives of this fact, at first apparently so strange, is, that the pneumonia which supervenes in these circumstances is in some degree analogous to traumatic pneumonia, of comparatively mild nature, as we know; and that tubercles in this case simply act the part of a foreign body.

Paris, July, 1847.

ART. II.—*Clinical Cases.* Reported by BENJ. F. WENDEL, M.D.

I have not before had time to make out a report of the following clinic, although it was delivered by PROFESSOR PARKER, May 24, 1847, and should not now attempt it did it not seem to me to possess uncommon interest.

CASE 1. *Convulsions.*—A child eight months old, of healthy family, some three weeks since had convulsions, and at this time had some twenty a day, according to the mother's account, though last week it had but one, which lasted a quarter of an hour. It vomited before the convulsions came on, and cried much at the same time. It is fed on milk, and sugar and water. Its bowels and water are free; it has not slept well for three weeks; it has never received any injury on the

head, and never squinted. Convulsions depend upon some irritation of the nervous system, and the question is, what gave rise to the convulsions three weeks since? did they arise from some irritation in the alimentary canal, which is the most common cause, or from some affection of the brain? During a convulsion, this child does not froth at the mouth, though the hands are clenched; its legs are small, but they are pretty well developed; its head is large, and the vessels large and full; the fontanel is large and elevated, the parietal suture is still open, and on striking we have fluctuation.

Convulsions may arise from some irritation in the alimentary canal, as improper food, dentition, ascarides, etc.; but this child has had good food, dentition is not progressing, and it is not probable that it has ascarides. May the head be in a morbid condition? Most probably it is. The child was restless a day before the convulsions came on, its head was hot, and it vomited prior to the attack, which last is one of the earliest symptoms of disease of the brain; the fontanel is elevated, the sutures open, and by striking fluctuation is perceived; its legs are small, and the head thrown to one side—all these indicating disease of the brain. Its bowels and water are free, which is not generally the case in disease of the brain. Now, if the brain is the primary seat of disease, the chances of recovery are small, and hence our prognosis is unfavorable.

Treatment.—Let its head be kept cool, and its extremities warm, friction up and down the spine; and to promote the absorption of the effused fluid, one of the best remedies is hydriodate of potash, of which let the child take one grain four times a day until ten or twelve grains are taken, watching the while if the renal discharge is much increased.

Such a child as this should not be taught to exercise its mind early; precociousness is a bad symptom in children, and they are well enough off if they do not learn their letters at six or seven years old.

Case 2. This is a man complaining of pain in the head,

which he has had for two weeks. He had intermittent fever several years ago, and last summer had a pain in the head similar to the present one. He is a full eater, takes a glass of beer once a day; his bowels are regular, and his water is free. The pain is in the temple, under the skull; is of a darting kind, quickly shooting across; affects the left eye and the ears somewhat, though he has no noises in the ears. He was perfectly well during the last winter, and has never suffered any injury of the head, and has not had fever. The antiphlogistic plan has been tried in his case; he has been leeched, cupped, blistered, and purged with salts, without benefit. This is either inflammation involving the bloodvessels, or it is irritation which involves the nerves. There is no inflammation without some irritation, but there may be irritation without inflammation, and a great point in practice is to distinguish between the two. In inflammation the pain is persistent; here it is not. The inefficacy of antiphlogistics leads us to call this a case of irritation, which will not be relieved by such means. This irritation may have arisen in consequence of the intermittent fever which he had years ago.

Treatment.—As his tongue is coated. we will clear the way by an emetic and gentle cathartic, and then begin with quinine and morphine, or iron.

Case 3. A peddler, 24 or 25 years old, who had venereal disease eighteen months since, not followed by any blotches or rheumatism, and who never received any injury, was married six months ago, and now complains of pain in the small of the back, and weakness and uneasiness in the limbs after walking. He feels easiest while sitting, and most uneasy while standing; he walks well in the fore part of the day, but in the afternoon has pain in the small of the back, in which region he has had a strengthening plaster, which seemed to do him good; there is no inability to flex the thigh upon the pelvis, nor any tenderness or pain caused by pressure or percussion of the trochanter, to indicate hip disease. In hip disease the patient rises stiff in the morning, while this man rises from

bed perfectly well. If there was inflammation, the pain would be increased by walking, while the opposite obtains in this instance. This is a case of debility in the back, and such cases are often seen in boys of sixteen or seventeen years, arising from masturbation, etc. This man admits that he has been in the habit of indulging his sexual propensities with his wife quite freely; his pains did not commence until after his marriage; and these show that his nervous system has been overtasked.

In the treatment, this man is to avoid the exciting cause, apply the cold dash, pouring a bucket of water on the back and hips, keep his bowels free, and take much exercise.

Case 4. An Irishman, about thirty years old, a laboring man, who uses spirits, came in complaining of a steady dull headache, which is worse in the forenoon, especially before breakfast, and of palpitations which render his nights sleepless. His tongue is heavily coated, appetite not good, bowels irregular, bad taste in the mouth on rising in the morning, and continual thirst. The question is, what causes his headache and palpitations? Does the affection depend upon gastric derangement—derangement of the functions of the alimentary canal—or is there disease of the heart? For disease of the semilunar valves we listen between the third and fourth ribs, and at the apex of the heart for disease of the mitral valves. If there is hypertrophy, the heart's apex is nearly if not entirely under the nipple, there is protrusion of that side, and, more of the heart's surface being in contact with the walls of the chest, there is more dullness on percussion. In such cases as this, the pain is more frequently under the pap or to the left of it; but if the trouble is about the heart, the pain is in the left shoulder, and sweeps down the arm of that side.

We must correct this man's digestive apparatus.

Case 5. This is an infant in whom the lymphatic ganglia of the neck are enlarged. Dr. Parker remarked that they

would generally go on to suppuration, and recommended a flax-seed poultice.

Case 6. This is a woman who complains of prolapsus of the uterus, and of discharging gravel, which she says were white. As an examination could not be made in this case, Dr. Parker remarked that the phosphatic deposits indicate a depraved state of the system, and were often produced by injuries of the spine; and that in persons of full habits, as the rheumatic, lithic acid and lithate of ammonia occurred.

Case 7. A livery stable keeper, of temperate though full habit, sixty-one years old, has cancer of the lower lip, which has been coming for four years. It commenced in something like a wart, which he was in the habit of pinching off as soon as it came, and for its cure has used various quack medicines; but it has been gradually increasing in size up to this time.

In the treatment of cancer, the less you irritate it the better, for irritating substances always increase the disease. If not disposed to grow, just shield from the air, and if disposed to grow, resort to the knife.

New York, August, 1847.

Art. III.—*A Case of Four Children at a Birth, Complicated with Hemorrhage.* By Mr. John H. Donnell, Student of Medicine in the University of Louisville.

On the 6th of February last, I was called to visit Mrs. D., whom I found laboring under an attack of pneumonia. The disease yielded to active treatment, convalescence being established in the course of five or six days. On my first visit I was informed that the patient was six months advanced in utero-gestation; from her unusual size, I was led to suppose that her confinement would probably take place in less than a fortnight.

After she recovered, I heard nothing from her until the 31st

of May, when I was called to visit her. On my arrival, I learned that one child was already born—a foot presentation; but on examining the patient, I found that there was another, and that the right shoulder was the presenting part. I ruptured the membranes, turned, and delivered by the feet. Another pain ensued in a short time, and a third child was delivered—a vertex presentation. At this period an alarming hemorrhage took place, for which I administered a large dose of tincture of ergot, and, being compelled to consult the safety of the mother, tied and divided the cords. Fortunately for my patient, the hemorrhage ceased very soon, and by the time it had done so I was satisfied of there being still another child, and that the vertex was presenting. I ruptured the membranes, expecting that the child would be speedily delivered; but after waiting for a pain and making a second examination per vaginam, I found the right hand had descended before the head. This I immediately returned, and, the uterus being stimulated to a vigorous action by the introduction of the hand, the head was thrown from the brim of the pelvis, and descended as in a natural presentation, the child being born in a short time. Hemorrhage again took place to a considerable extent at this stage; but on the administration of another dose of ergot, and the use of friction over the abdomen, uterine contractions came on, and the flooding ceased.

After waiting about fifteen minutes, one of the placentas was thrown off, to which were attached three of the umbilical cords; it was very large, having on its fœtal surface two distinct chambers. After waiting nearly an hour longer, I was under the necessity of introducing my hand and detaching the second one from near the fundus of the uterus; the attachment was slight. Tonic contraction of the uterus occurring, my patient was put to bed in safety, but, as might be expected, very much exhausted. She recovered rapidly, and, when I called to see the children, three weeks afterwards, was able to attend to her household duties. It may be proper to remark that the first child floated in its own waters, and likewise the last; the second and third floated together.

The following is the weight of each child, taken in the order of birth: 1st, a girl, 6 pounds; 2d, a girl, 4¾ pounds; 3d, a girl, 2½ pounds; 4th, a boy, 6½ pounds; making in all 19½ pounds. The children were all well formed, and five weeks after birth were living and hearty. The mother is thirty-three years of age, and is the mother of ten children, including the last four. The father is a robust man, about forty years old.

Postscript.—Since writing the above, I have learned that the smallest child died about five weeks after its birth, probably from overfeeding.

Franklin, Illinois, November 5, 1847.

ART. IV.—*Removal of a Large Scrotal Tumor.* By LEWIS A. SAYRE, M.D., of New York.

The subject of the following operation was a Spaniard, 21 years of age, who had had hydrocele from his fifth year. The hydrocele continued to enlarge until he attained his nineteenth year, when I operated upon him, and drew off nearly a quart of water from each side, injected iodine, and the hydrocele was completely cured. But the dartos muscle had been so long distended that it became paralyzed, and consequently the scrotum remained pendulous, dragging down the integuments of the abdomen so as completely to sheath and conceal the penis. The mass formed a tumor between the thighs as large as a child's head—measuring, in fact, twelve inches from the base of the penis to its lower edge near the anus.

The danger of this operation, as is known, is in the secondary hemorrhage. When the vessels are first divided, they retract so that it is often impossible to secure them; and after the wound has been dressed a few hours, numberless small vessels pour out blood into the sac, and cause it to burst, or else establish a formidable suppuration. I therefore had made two pieces of bent steel, twelve inches long, with a screw in

each end, and placing one on each side of the scrotum parallel with the raphe, screwed the two together, with the tumor between them, sufficiently tight to cut off the circulation in the part I wished to excise. I then transfixed the mass with eight needles, an inch or more apart, so as to catch the septum and lining serous membrane; I then excised the mass with a single sweep of the knife. No hemorrhage whatever followed. I proceeded next to place over the needles the twisted suture, as for hare-lip, and took an interrupted suture between each of these, which brought the parts accurately in apposition. Finally I unscrewed the clamps (I know not what else to call them) a little, so as not to interrupt the circulation entirely in the lips of the wound, but still kept them sufficiently tight to prevent any hemorrhage into the sac. In five days the whole wound, twelve inches in length, had healed by the first intention, not one drop of matter having been formed.

The advantages of this mode are very obvious. Surgeons are well aware of the difficulty of accurately adjusting wounds of the scrotum. Adhesive plaster is useless; and the dartos muscle is so constantly in motion that we cannot keep the parts in constant apposition, even with closely applied sutures; whereas by the apparatus I employed we keep the parts accurately in place, and by the control of the screws we may keep hemorrhage completely in check, at the same time that it may be so regulated as not to interfere with the healthy circulation of the parts.

New York, November 1, 1847.

ART. V.—*Cases.* By Dr. T. C. OSBORNE, of Erie, Ala.

Death from Over-eating.—Autopsy. In September, 1846, a stout-bodied negro, twenty years of age, previously unhealthy, ceased to labor on account of an œdematous affection of the inferior extremities, preceded by pains and immobility of the knee joints. In the following February, having exposed himself carelessly on several occasions to inclement weather, anasarca became general, and ascites, acute cephalalgia, bulimia, and pain in the right hypochondrium, were in a short time superadded. Mercurials, drastic purgatives, and iodine were administered, and by the 20th of March he was able to resume his place in the field; the morbid appetite, however, continued to occasion so much distress that he declared an intention to appease it if it should cost him his life. Accordingly, on the night of the 10th of May, he stole and ate the week's allowance of a healthy negro man. Next morning he went out to work as usual, but getting thirsty, stopped at a stagnant puddle and drank water until the stomach became painfully distended, which was followed in a short time by convulsions and apoplectic coma. When I arrived, four hours afterwards, he was in the following condition: extremities cold and trembling; pulse 70, natural; respiration prolonged and deep without stertor; immobility of the eyes and contracted pupils; heedless of noise or violence. After 40 ounces of blood had been taken, by venesection and cups to the temple, he awoke, complained of pain in the head and right side, and, grasping the penis, hastily directed a full stream of clear urine against the wall. I mention this circumstance because, during the remainder of his sickness, although able to walk about and converse rationally, the dejections of urine and fæces passed involuntarily.

May 27th. Emaciation—delirium—convulsions—death.

Autopsy, six hours after death. When the cranium was opened a large quantity of thin, dark, offensive blood escaped. On the convex surface of the left anterior lobe of the brain,

the arachnoid membrane exhibited a circumscribed patch, two inches in diameter, of diffuse redness. Cerebrum strikingly blanched. Right lateral ventricle contained a small quantity of bloody serum.

Thorax. Organs normal.

Abdomen. Liver pale and indurated. On the convexity of the right lobe there was a white circular cicatrix as large as a quarter of a dollar, and of cartilaginous consistence. Two others were found on the left lobe. Near the cicatrix on the right lobe the liver and diaphragm were united by adhesion, requiring for their separation very delicate dissection. Gall bladder filled with black bile.

Stomach. Two kinds of discoloration pervaded the mucous membrane of this organ—one a large patch at the great extremity, of a deep livid or purple color; the other consisted of several small patches of intense redness, distributed in an arborescent and speckled manner over the pyloric extremity. The mucous texture at the great curvature was softened and covered by a thick coat of tenacious mucous. Other abdominal viscera healthy.

Purpura Hemorrhagica. The history of any fatal case of disease, unaccompanied by the post-mortem revelations, is comparatively valueless; but in as much as the design in the present instance is to illustrate the efficacy of an agent in the cure of a malady, by adducing subsequent examples of its successful application, the subjoined case, it is believed, will be found instructive.

Case 1st. During a tedious convalescence from a protracted tertian fever, Miss ———, aged 12 years, in easy circumstances and well grown, was observed, on the 5th of August, 1842, to have an eruption of stigmata on the extremities, unattended with fever. These continued to multiply rapidly and coalesce, changing their color from a deep red to a dark purple, up to the 7th, the time of my first visit. The surface was now spotted everywhere with petechiæ and vibices, ir-

regular in figure and size, leaving pale and flaccid intervals, which rendered the appearance of the patient singularly frightful and forbidding. Blotched face, ink-stained appearance of the lips, buccal membrane, fauces, and nasal cavities; dark, spongy, blood-oozing gums; furred tongue; accelerated pulse; slight fever, and headache. The appetite and bowels regular and good. Patient amusing herself out of doors when I arrived.

Treatment. Ordered her immediately to bed; a tepid pediluvium; a purge of calomel and jalap, to be followed in a few hours by castor oil and spts. turpentine.

8th. Bowels freely opened by medicines, and dejections of a bilious appearance; nausea, vomiting, fever, thirst, epigastric tenderness and pain, hurried respiration, quick pulse, intense cephalalgia, hemorrhage from the stomach, mouth and nose.

An orifice was made in a vein of the arm, but from the rapid sinking of the pulse was quickly closed again. The surface around the incision became in a few moments ecchymosed. Cold water to the head; blister on the region of the stomach; barks, acid, wine, cinnamon water, apple-ade, turpentine enemata, and mustard foot bath.

9th. The blistered surface was elevated and filled with fluid blood; increased hemorrhage; wild and anxious expression; constant tossing; great thirst; ardent fever; incessant efforts at vomiting, the matter ejected consisting of water and occasionally black blood. Every thing taken by the mouth and anus rejected instantly.

10th. Ecchymosed eyes—delirium—death.

Case 2d. A male infant five months old, the offspring of indigent and unhealthy parents, had a severe attack of pneumonia on the 1st of October, 1843, but on the 9th was thought to be convalescent. Ten days afterward it was taken with purpura hemorrhagica of an asthenic and aggravated character.

A pail full of cold water was immediately dashed on the

naked infant, and ordered to be repeated night and morning; a decoction of bark acidulated with elixir vitriol three times daily; port wine. In illustration of the magical manner in which this course arrested the frightful progress of the disease, it is sufficient to state, that on the 22d, three days after it was commenced, the patient was considered well.

The insertion of the following letter is due to my friend, Dr. Norman, of Wilson county Tennessee, to whom I am indebted for a knowledge of the powers of the cold dash in this most perplexing disease. The letter was intended to reach me during my attendance on the case first detailed, and is dated 8th August, 1842:

Mrs. ——— informs me you have a case of purpura. I have had two cases and treated both successfully. It is a rare disease in our section of country, and I know you will not think me too officious in giving you my treatment. This consisted in the very free use of *muriatic acid*, the *cold dash*, and mild aperients. One case occurred as the sequel to an attack of fever; the patient had been slowly convalescing for three weeks, when, rather suddenly, he was taken with hemorrhage from the gums, and petechiæ from head to foot. Being treated as above stated, he was in a week quite well The only circumstance worth your notice is the *freedom* with which the acid may be used, and the *efficacy* of the cold dash. I have taken this liberty because I was at a loss myself, and would gladly have received any information on the subject.

Very truly, your friend, THOS. NORMAN.

Dr. A. Puckett, late of Beardstown, Tennessee, in a letter dated about the same time, states that a man of athletic frame was attacked with purpura hemorrhagica shortly after recovering from intermittent fever. In addition to the symptoms of congestion and phlogosis in this case, there was a very considerable œdema of the extremities—"the fingers and toes stood in a strut." But under the liberal use of the treatment

recommended by Dr. Norman, his convalescence was rapid and complete.

From these cases and much reading on the subject—having attentively examined the history of every case that I can find recorded—I have arrived at the following conclusions respecting this obscure affection:

1st. That purpura hemorrhagica is sequent upon some other disease or morbid condition of the system.

2d. That the altered condition of the blood is the proximate cause of the disease, which is itself dependent upon a morbid state of the ganglionic system.

3d. That there are evidently two varieties of the disease; the sthenic, or congestive; and the asthenic, or adynamic.

4th. That it bears no relation whatever to scorbutus, except in that condition of the system observed in typhus, yellow fever, pestis, and cholera, as well as in this disease which facilitates the appearances known as the characteristics of purpura hemorrhagica.

6th. That the phlogistic symptoms observed in purpura are the result of a combat between the capillaries of a healthy organ, and the chemically changed blood.

7th. That the cold dash is applicable in every case.

"*Worms found in the Heart and Bloodvessels of a Dog; Symptoms of Hydrophobia.* Drs. Jennings, Brown, Thorp, and myself recently made a post-mortem examination of a dog that died of supposed hydrophobia. The symptoms were those characterizing that disease, and so well marked as to alarm and mislead the entire community. He was one of those much valued hounds, used in hunting negroes; an old dog, whose health had been good; fat, ordinarily remarkably peaceable; but after his attack, the disposition and appearance of the animal were completely changed. He snapped at every living thing near him, assailing dogs, or bitches, acquaintances or strangers indiscriminately; exhibited dread of water;

emaciation; convulsions; and death ensued in ten or fifteen days from the time he was first observed to be diseased.

Autopsy.—The stomach and other abdominal organs were healthy; but the large blood-vessels were found filled with worms; the heart contained of these at least one hundred. The appearance of the worms was remarkably similar, differing only in length. They were round, white, tapering towards the tail, and from half an inch to four inches long, the thickness varying from one-fourth of a line to one line. I did not note as carefully as I ought the form of the head and mouth, and I believe the same is true of the gentlemen who assisted me in the examination.

Among the number of the bitten dogs was a pointer puppy which alone showed any symptoms of the same disease. It had two fits, and during the second leaped from a second story window, and was so injured that its owner had it killed. No dissection was made in this case.

Were the convulsions in these cases excited by worms? In the first case, I think there can be no question that they were, and it is to be regretted that a *sectio* was not made of the body of the second, to determine the fact whether worms existed in it also. Was the disease *hydrophobia?* I should say it was not, from the fact that of the number of animals bitten by the blood-hound but a single one exhibited signs of disease afterwards. Is it not probable that many of the cases regarded as hydrophobic, are in reality diseases of a different character, resulting from irritation in some part of the system? And may not worms occasionally be the cause of this irritation? The subject appears to me worthy of investigation, and repeated examinations of the bodies of these animals might lead to valuable conclusions.

October, 1847.

ART. VI.—*Pseudo-Membranous Cynanche Trachealis, following Scarlatina Simplex.* By Dr. M. H. FEE, Hiltonsville, Indiana.

H. J., a little girl aged five years, was, about a month since, taken with scarlatina simplex, which required no medical attention, the child not being ill enough to render confinement to her room necessary. About two weeks after the first appearance of the scarlatina, and after the very slight desquamation was completed, I was called to see her. I found a congested state of the mucous membranes generally, and of the mucous membrane of the bowels particularly, the tongue being of a deep red color. I ordered minute portions of calomel with Dover's powder, to be given every two hours till six were given; afterwards to move the bowels with ol. ricin., with enough paregoric to insure the mild operation of the oil. About 24 hours after I visited her and found her perfectly relieved, and rapidly convalescing. On Friday, 19th inst., she was able to leave the room and play at large with her little brothers and sisters. The day was damp and misty. In the evening a slight swelling was discovered in the substance of the right parotid gland, but it excited no apprehension for the safety of the child. During the next day the swelling increased, and the evening showed the presence of some fever. On Sunday morning the swelling and fever had both increased to a high degree. About 10, A. M., I was sent for, but being absent, did not see her till 1, P. M. I found the parotid gland as large as the longitudinal sectional half of a goose egg; the lining membrane of the mouth, palate, fauces, pharynx, and glottis much injected and intensely red, inflamed and swollen. I ordered a solution of tartarized antimony, 1 gr. to 12 teaspoonfuls of water, of which, 1 teaspoonful to be given every hour until pretty free emesis was produced. To be aided by diluent and diaphoretic teas; a blister applied to the throat, and salts to be given in six hours if the antimonial did not move the bowels within that time. Also directed all the inflamed membrane within reach to be touched occasionally with a solution of 5 grs. nit. argenti in pure water 1 ℥f. Vi-

sited her at 9, P. M.; found the fever much moderated. She had vomited two or three times, but had had no alvine dejection; mixed and gave 2 teaspoonfuls salts, and ordered the tartar to be continued through the night at intervals of 2 or 3 hours, with frequent draughts of tea of asclepias tuberosa.

Monday, 8, A. M., found the gland reduced in size, the redness of the throat less, with slight general diaphoresis. Ordered the tartar to be continued every 3 hours, with asclepias tea, and salts sufficient to keep the bowels loose. At 3, P. M., found her sitting up in bed, with less difficulty in breathing, moist skin, good blister, and less swelling in the gland. Thought her manifestly improving; touched her throat with nit. argent., and directed the tart. antim. to be given at longer intervals. One hour after I was summoned in great haste, the messenger affirming that the child was dying. As soon as I entered the room I heard the shrill metallic cough so characteristic of cynanche trachealis. There was great difficulty of breathing, with sleepy expression of eye. The prolabia were bluish, and a white streak starting at the alæ nasi and passing entirely around the mouth; laborious action of diaphragm and abdominal muscles; with extensive swelling of the rima glottidis; pulse slow, intermitting and dragging, taking double the usual time of one systole. I immediately gave iss. gr. sulph. cupri, which, at the end of 15 minutes, had made no impression, and fearing to increase the quantity, I trusted to large draughts of tepid water. In about 20 minutes I got slight emesis, during which a portion of pseudo-membranous secretion was expelled. The brain had now become so stupefied, that I could not, even with the most powerful emetics, make any impression. I ordered the albumen of a couple of eggs to be given, to envelope and conduct without injury to the bowels, any portion of the salt of copper which might not have been thrown up during emesis. The child rapidly grew worse. The inflammatory action was rapidly spreading through the lining of the bronchi and their ramifications. The pseudo-membranous secretion was on the

increase. About 10 o'clock she was nearly pulseless, and raving incoherently. Her lips were livid, face swelled, and eyes turned back under the lids. I scarified and applied a cup at the upper part of the sternum, and drew about iss ʒ. of blood, with marked relief, lasting about 15 minutes, when the symptoms became still more unfavorable. Despairing of saving her by any means short of tracheotomy, I proposed the operation, but was promptly refused by the parents. Not willing to give my patient up, I determined to apply the cups every half hour; about the third application, the lips partially regained their normal color, and the pulse, which before intermitted once in every three beats, now intermitted but once in ten. Seeing that the impression from the cups was not likely to be permanent, I concluded to make an eschar at the upper part of the sternum with nitric acid. The relief was immediate. The cups were applied once afterwards. Perfect sensibility and consciousness shortly returned; at which time I gave an emetic of tartarized antimony, which operated freely, and expelled a piece of membrane four inches in length. By morning she was expectorating freely, but as the day advanced her cough became rather croupy, for which I ordered the tart. solution to be continued every hour till I should visit her in the evening, with a tablespoonful of mucilage of gum arabic occasionally. At my evening visit she was again expectorating moderately. Put her on the use of infusion senega, with tart. antimony and carb. soda, under which she rapidly convalesced, and is now, 27th, in good health, the parotid gland having regained its normal size.

From this case it appears—

1st. Inflammations in the neighborhood of the pharynx, in children, should be held as possible originators of croup.

2d. That the sequelæ of scarlatina simplex are generally more to be dreaded than those of the worse forms of scarlatina. These conclusions are drawn from my own observation in my practice in scarlatina this summer. I have had no sequel to follow the anginose variety in any case, and but once in the malignant variety, while in at least 25 per cent. of the

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simple variety complications occurred, generally in the form of frontal abscess, chronic swelling of the parotids, and lower extremities, rheumatic pains of the joints, &c., &c.

3. That emetics are of no service after the brain has measurably lost its sensibility from want of decarbonization of the blood.

4th. That cupping, unaided by more powerful revulsives, is of but little service, because it does not create sufficient irritation to keep up a permanent afflux of blood to the part cupped.

5th. And lastly: That it is a culpable waste of time to trust to vesication, with any thing slower in its operation than boiling water or aquafortis.

SEPTEMBER 27, 1847.

BIBLIOGRAPHICAL NOTICES.

ART. VII.—*Lectures on Natural and Difficult Parturition.* By EDWARD WILLIAM MURPHY, A.M., M.D., Professor of Midwifery, University College, London; Obstetric Physician, University College Hospital; and formerly Assistant Physician to the Dublin Lying-in Hospital. New York: Samuel S. and William Wood.

A press of duties has prevented us from giving, until now, the lengthened notice of this work to which its merits entitle it, and though late, we return to it at this time for the purpose of presenting our readers with such an analysis of its matter, as will enable them to judge whether the very favorable opinion which we expressed concerning it, on its first appearance, is too high. The author, besides being a teacher of eminence in this branch of the profession, is possessed of social and moral qualities which impart an additional interest to his lectures for those who enjoy his acquaintance. His attentions to our young countrymen have made him friends, on this side the Atlantic, who will always rejoice in his prosperity, and receive with a liberal spirit whatever may emanate from his pen. Apart from any preposessions in his favor created by this cause, the intrinsic excellence of these lectures ought to insure them an extensive circulation. We are sure that no one can rise from their perusal without a conviction, that they are the offspring of a strong, practical, cultivated mind. The volume comprising them is not large, and yet it will be found to evince research on all the points presented. Passing over the two first lectures in which the anatomy of the Pelvis is described, our first extract is furnished by the succeeding one on the *mechanism of parturition*—a subject, as our readers all know, upon which obstetricians are far from being of one mind.

"We would now direct your attention to the means provided by nature, to prevent the danger which might arise during this process. If the uterus exerted its full power upon the undilated os uteri, and if the unyielding head of the child were driven forcibly against it, the almost certain consequence would be, that the irritation would excite increased resistance, and ultimately terminate in inflamation of the mouth of the uterus. To obviate such an effect, nature interposes *a fluid medium* between the power and the resistance. The liquor amnii contained within the membranes, occupies the cavity of the uterus, and when its parietes contract upon it, the force exerted is (as we have explained) by this means, accurately conveyed to the os uteri. When the latter dilates in the slightest degree, the fluid insinuates itself within the smallest opening, and expands it by a direct lateral pressure against its edges. The power of the uterus is thus made to act in the most favorable manner for distending its mouth.

"Other advantages are also gained. The os uteri may dilate irregularly; but any attempt to overcome forcibly the undilated portion, is prevented when the force is conveyed through a fluid, which, while it readily yields to an undue resistance, still maintains an equable pressure upon the edges of the os uteri. Any irregularity in the action of the uterine fibres, is also, to a certain extent, obviated, because these contractions, although irregular, being still conveyed by the fluid, are thus equally communicated to the os uteri. Further, so long as the tissue of the uterus intervenes, it is necessary to moderate the great power which the uterus is capable of exercising to dilate it: this is effected by the liquor amnii. The force conveyed by a fluid, you are aware, does not act in one direction only, but is distributed to every part of the surface to which the fluid is applied. The force, therefore, which is exerted to expand the mouth of the uterus, being communicated by a fluid, is not only directed against the os tincæ, but against the fundus and sides of that organ. The fundus, consequently, is opposed, not only by the os uteri, but by its own action reflected by the liquor amnii. Hence, so long as the fluid remains and the os uteri is undilated, the more powerful the action of the fundus, the greater is the resistance to it. The actual force employed, is therefore very moderate, and any sudden or violent effort at distension is altogether obviated. You may observe this in the character of the pains during this stage. You will find, that, however severely they may commence, they last but a short time, and the effect on the os uteri is comparatively slight. If these short, though se-

vere pains, be contrasted with the long-continued and powerful pains which follow them when the liquor amnii is discharged, and the os uteri dilated, the difference in the effect will be sufficiently obvious. As a means, therefore, of conveying the whole muscular power of the uterus upon the os uteri—of moderating and equalizing the force employed—of dilating the mouth of the uterus without exciting irritation—the liquor amnii is of essential importance.

"We shall now consider *the order* observed by the uterus in the contractions which take place. This may be ascertained experimentally. For instance: when the hand is passed into the uterus after delivery, to remove the placenta, we find that it may remain for sometime in the cavity without exciting its contraction, but the moment the hand is being withdrawn, the fundus instantly contracts, and as it passes along the vagina, the contractions are continued from above downwards; so also, in other instances, when the os uteri is only irritated by the fingers of the hand introduced in the vagina, and an attempt is made to dilate it, the fundus immediately contracts, not the os uteri. You have thus a very favorable illustration of the reflex nervous function. Hence we infer that the order of uterine contractions is from the fundus downwards, and that the action is commenced there."

But as this view of the matter has been controverted, Dr. Murphy exhibits at length the reasoning upon which the opposite opinion rests. Wigand is the chief advocate of this doctrine, and his views are copied from the work of Dr. Rigby, as follows:—

"In examining the course of a true pain, we shall find the contractions of the uterus *do not begin in the fundus, but in the os uteri*, and pass from one to the other. *Every pain which commences in the fundus is abnormal;* and either arises from some derangement in the uterine action, or is sympathetic with some irritation not immediately connected with the uterus, as from colic, constipation, etc. We very seldom find that a contraction of the uterus which has commenced in the fundus, passes into the cervix and os uteri, and becomes a genuine effective pain; usually speaking, the contraction is confined to the circumference of the fundus, without detruding the fœtus at all. When a genuine pain comes on, so far from the head being pressed against the os uteri, it at first rises upwards, and

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sometimes gets even out of reach of the fingers, *whilst the os uteri itself is filled with the bladder of membranes;* if it had commenced in the fundus, instead of the inferior segment of the uterus, so far from the head being drawn up at the first coming on of the pain, it would have been forcibly pushed down against the os uteri. In the course of a few seconds, the contraction gradually spreads over the whole uterus, and is felt especially at the fundus; the head which has been raised somewhat from the os uteri, is now again pushed downwards to it, and seems to act as a wedge for the purpose of dilating it; it is not until the whole uterus is beginning to contract, that the patient has a sensation of pain. We may therefore, consider that a genuine uterine contraction consists of certain phenomena which occur in the following order:—First, the os uteri grows tight, and the presenting part rises somewhat from it, then the rest of the uterus, especially the fundus, becoming hard, the patient has a sensation of pain, and the presenting part of the child advances."

Upon which our author makes the following remarks.

"Now, if we desired an additional evidence to prove that the fundus was the first part of the uterus to contract, and not the os uteri, we could not have a stronger proof than that advanced by Wigand to support a contrary opinion—viz., the head when the contractions commence, getting, "even out of reach of the fingers, whilst the os uteri is filled with the bladder of membranes." In Wigand's explanation, the influence of fluid pressure seems to be altogether forgotten. The immediate effect of contraction commencing at the fundus would be to compress the liquor amnii which of necessity forces its way before the head, on to the mouth of the uterus. The fluid in this position re-acts against the head wit the same power that it is compressed, and therefore pushes it up until the increasing contraction of the fundus forces the head down again, so that you perceive the phenomena quoted are quite consistent with the statement that uterine contraction begins at the fundus; in fact, it could not be otherwise, so long as the waters remain in the uterus. But if the contraction commenced from below, the fluidmust be driven upwards towards the funds, and that portion between the os uteri and head pressed aside, at least in the first instance so that the head might be easily felt when the pain commences, although not so afterwards; but the reverse is the case, and you will find that in those cases where the liquor amnii is in large quantity, that it is difficult to feel the head at all, except

in the interval of the pains. "The tightening of the os uteri," alluded to by Wigand, seems to be another source of error on this point, it being generally confounded with muscular contraction of the os uteri. It seems to me to be produced by the pressure of the fluid downwards against the sides of the uterus, combined with the increased determination of the blood towards the os uteri, which arises from the vessels at the fundus expelling a portion of their blood during its contraction. The os uteri is rendered fuller, and the lips are more closed than before; hence the opinion that it is muscular contraction, the evidence for which does not seem to me sufficient to establish so important a fact."

We shall not follow him in his criticism of the various theories advanced, by Dewees and others, to account for this process, but proceed to matters of greater practical moment.

Our next extract is from the sixth lecture, on the second stage of labor, in which are stated, concisely and in a pleasing style, the "obstetric duties of the practitioner." He says:

"The *first object*, then of a vaginal examination in this stage, *is to determine the proportion between the head and the pelvis.* For this purpose the fingers should be passed carefully between both in the interval of the pains, directing them, in the first instance, between the pubis and the head, and moving them round on either side. The ear can be felt if there be sufficient space for the head to pass, but if the head be high up in the pelvis, the finger can only just touch it. If the ear cannot be reached readily, and there seems to be a want of proportion between the head and pelvis, you have still another means of testing its degree, by examining the presenting part of the head. When it is only slightly compressed, the scalp is simply folded or puckered by the closing of the sutures: as the compression increases, these folds merge gradually into one, which ultimately forms a distinct tumor. This continues to enlarge, so that in cases of impaction of the head, it is sometimes of great magnitude. The manner in which this change takes place, and its degree, is generally a sufficient proof of the amount of the disproportion. If the tumor form very slowly, and never increase to any great size, you may infer that the head will pass safely through the pelvis; but if, on the contrary, it increase rapidly, and attain a great size, the indication must be unfavorable.

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"The *second object* of a vaginal examination is to ascertain the exact position of the head. We have already pointed out to you the means of distinguishing the different positions from each other. We shall, therefore, at present only bring before your notice those positions which we are directed to by some authors to alter as soon as they are found out, in order to prevent the head from becoming impacted in the pelvis afterwards.

"One of these cases is when the head enters the brim in the left fronto-cotyloid position. It is assumed that this cannot pass safely, but will cause great delay and difficulty in the labor; therefore, it is laid down that the correction must be made the moment the position is ascertained. We have already stated to you the experience of Naegele, confirmed by other observers, that nature, if left to herself, will correct this deviation, by rotating the head into the right occipito-cotyloid position. The probability is, therefore, that by meddling too soon you may prevent this, and prematurely force the head into a more unfavorable position than it had been. The moment this position is detected is not therefore, the time for interference; it is more advisable to wait and observe the course the head will pursue. It may correct itself; it may advance and be delivered in the third position without injury; it may be arrested. The last is the only condition which would justify your aid. The head may then be displaced from its situation, and pressed back in the intervals of the pains, and a *very slight rotation* is generally sufficient to make it glide easily in its proper direction when the pains return. The very same observation applies to those instances where the head and hand, or even arm, descend together. This accident is often the result of the pelvis being too wide, and if so, both will be expelled without difficulty; but sometimes the arm comes down a little too much and prevents the head advancing, or the head may be arrested by the hand descending with it. In either case, the hand or arm can be very easily pushed back when the pain ceases, and so maintained until the next pain advances the head, which generally passes down very rapidly as soon as the correction has been made. When the head is in the cavity of the pelvis, there is not the same danger of displacing it as when it is only entering the brim; and consequently, our previous observations on this accident (pp. 98–99) do not apply to the present case. You should not, therefore, when these deviations occur, too hastily assume that the head cannot be delivered It is more advisable to wait until they become causes of delay.

"The *third object* of a vaginal examination is, to note the progress which the head makes. In natural labor, where no difficulty presents itself, a very few examinations, at proper intervals, will be sufficient for the purpose, because its advance is generally quite obvious; but in difficult labors, where the head makes a very slow progress, and there are other causes of embarrassment present, more care is required; their consideration, however, is beside our immediate subject. Having ascertained the position of the head, and its relation to the pelvis, the next object of attention is its descent upon the perinæum. You must, therefore, *be prepared to give the perinæum support* the moment it suffers any degree of distension. The mode of doing so, which I have been in the habit of adopting, is somewhat different from that directed by the more popular writers on midwifery. Ramsbotham and Rigby both employ the left hand to press against the perinæum, and the right is kept in reserve to make any necessary correction. Churchill and others adopt the same plan. Dr. Rigby admits that 'it is awkward at first, because it requires the hand to be considerably twisted, and makes the wrist ache a good deal.'"

Other directions which will be found by the young practitioner of great service are thus clearly given. The author is still speaking of the mode of supporting the perinæum.

"The plan which I have found the most useful and convenient to adopt at this period of labor, is the following:—To sit behind the patient as she lies upon her left side, the back of the chair being towards the head of the bed, and while the head of the child is passing through the pelvic cavity, to press moderately with the left hand over the hip of the patient. Counter-pressure in this way employed is generally grateful to her, and seems to give her some relief; it assists also in keeping the pelvis fixed when the head is passing the perinæum, the most important part of this process. Having the left hand so employed, the right can be used to support the perinæum, a single fold of a fine napkin should be placed along the edge of the perinæum, and the right hand so applied that the fold of skin between the fore-finger and thumb should correspond to this, the fore-finger and thumb passing on either side of the vulva, and the palm of the hand, resting against a thicker fold of the napkin, applied to the posterior part of the perinæum. By this means you have full power to make any

counter-pressure with the palm of the hand which may be necessary, and the fingers being quite close to the edge of the perinæum and vulva, you can easily trace the margin of the perinæum, and feel the head, if necessary. Thus one hand fulfils the office generally assigned to two, and enables you to grasp with the left hand the pelvis, to prevent the patient moving away too suddenly when severer pains come on. If, the head being expelled, this be no longer necessary, you can employ the same hand to support the uterus during its contraction in expelling the body of the child. Besides these advantages, it is certainly less fatiguing. The only inconvenience of this method is, that when the funis is coiled round the neck of the child, so as to make it necessary to remove it, or that the delivery of the shoulders should be assisted, the hands must be changed, that the left may support the perinæum and the right make the required correction. But this is a temporary disadvantage and only arises occasionally. We shall suppose you, therefore, thus prepared to give the perinæum the required support; the only question is, when your assistance is needed. The young practitioner, fully impressed with the importance of preventing laceration, hardly ever commits the mistake of being too late in attending to this point. He very generally errs on the other side: he presses against the perinæum a great deal too soon, and causes unnecessary heat and irritation in consequence, which rather retards its distension. His mistake arises from supposing the perinæum in danger the moment the head touches it. We have explained to you that the head alternately touches and retreats from the perinæum, often for a long time before the perinæum suffers any dangerous distension. You must not, therefore, be too precipitate; it is better to wait until you feel the head protruding, with each pain, through the vulva, because at this time it is getting gradually upon the ischio-pubic ramus, against which it rests, while the anterior part of the head presses, with considerable force, against the perinæum. Caution is also necessary as to the manner in which the perinæum is supported. The object in view is to obviate the effects of too violent distension. The pains at this time are very unequal, sometimes weak and again very strong; you support the perinæum against the latter by moderate counter-pressure, to prevent accidents; but against the former no such precaution is necessary: you must not, therefore, press with every pain indifferently, but only when the uterus is acting with great force. Again: when the head is nearly protruded through the vulva, anxiety to save the perinæum may be the cause of its

rupture. For instance, if you attempt to draw the perinæum back over the head, it will be stretched too suddenly over the bi-parietal measurement, the widest part of the head. If, on the other hand you push the head too much forwards, pressing with the pains from the sacrum towards the pubis, the same effect will be produced in a different manner; you force the parietal portion on the head too rapidly through the vulva. At this point it is better to continue the same moderate counter-pressure, to make no attempt to hasten the delivery, and to allow the head to pass along the hollow of the hand, in the same manner as it moved along the curve of the sacrum. When the head is passing out of the vulva, you should then direct it forwards toward the pubis; and when it is delivered, examine carefully lest *the funis may be coiled round the neck.* If such be the case, and that is only a single coil, it will generally be sufficient to draw down a little more of the funis, and loosen it. A single coil seldom retards the delivery of the child, or arrests the fœtal circulation; but two, and even three, coils are sometimes met with, and the child placed in great danger of strangulation. In these cases, as much of the funis as possible should be brought down, and the coils so loosened that one may be drawn over the head. There are cases where this cannot be done, and the only resource left is to tie and divide the funis, and extract the child as soon as possible, in order that respiration may be established. This operation is hazardous to the child's life, and can only be viewed as the lesser of two evils."

From these passages the reader will be able to form his own opinion respecting the style in which the author imparts his precepts. We have no fears that it will differ materially from the one which we have ventured to express.

Having presented these specimens from the body of the work, we shall now copy some of the "*Aphorisms*" with which it is concluded. These aphorisms are a summary of the principles and rules laid down in the lectures. The condensed form given to these important rules in this Summary will be very acceptable to the young practitioner, who may have occasion to refer to a work on obstetrics in the midst of pressing professional duties.

"*Management of Natural Labors.*—The 'show' is a slight sanguineous discharge, arising from the ruptured vessels of

the mouth of the uterus, when it first dilates. As soon as this takes place, labor properly begins. The patient has now entered upon the first stage.

"When called upon to attend a patient, *the summons should be instantly responded to.* Your introduction should not be abrupt; and if called to a patient for the first time, still greater caution should be exercised.

"During the early part of the first stage, it is not necessary nor advisable to remain in the room with your patient. It will be sufficient to remain in an adjoining room, until there is occasion to make a vaginal examination.

"When the pains have continued for some time regular and frequent, an examination may then be made. The patient, loosely attired in her night-dress, should lie on the bed on her left side, as near to the edge as possible, having the knees drawn up towards the abdomen. You should then wait until the pain returns, and when it is about to cease pass the forefinger of the right hand, anointed with cold cream, or any unctuous substance, within the vagina. Examine whether it be rigid or relaxed, dry or moist. Examine the rectum through the posterior wall, and fundus of the bladder through the anterior. Introduce the middle finger, in order to examine the os uteri. Pass both fingers along the sacral side of the vagina, and when you cannot advance them further, direct them forward towards the pubis; you then feel what seems to be the irregular folds of a flaccid bag, projecting into the vagina: examining this with caution, the edge of the os uteri may be traced; if the finger be passed within it, you will sometimes feel the head; you may often fail, and yet the head present. The dilatability of the os uteri, its direction, and the degree to which it is opened, should be ascertained.

"If the membranes are ruptured early, an examination should always be made, lest the funis or the shoulder present. Before the fingers are withdrawn from the neighborhood of the os uteri, examine the distance of the sacrum; and as they are being withdrawn, ascertain if possible the space in the pelvic cavity.

"In order to make a sufficiently careful examination, a little time may be required, during which the pains may return; you should then cease until they subside, noting only those points which have been mentioned; but make it a rule not to withdraw from your examination until you have perfectly satisfied yourself as to the character of the labor. Having accomplished this, a second examination during this stage, unless it be prolonged, would be unnecessary.

"The first stage of labor is not always completed before the second begins. The grinding pains merge into the bearing pains so gradually as to require some attention to observe the change. When the bearing pain comes on, the patient is obliged to grasp firmly whatever is within her reach, she retains her breath mor than before, and sometimes makes an involuntary effort to bear down. Her voice also alters, its tone is more subdued, and she seems more patient of her sufferings than before. Sometimes the complete dilatation of the os uteri is marked by the constitutional symptoms; there may be a slight rigor or vomiting, perhaps a strong inclination to go to stool.

"The patient must now remain in bed, which should be properly prepared for her reception. A skin of morocco leather, or a broad piece of India-rubber cloth, must be placed next the bed, to protect it from being stained, and a blanket folded very wide, and enclosed in a soiled sheet, placed underneath the hip of the patient, as she lies upon her left side. They should be so fastened together, that the whole may be moved at once.

"When the bearing pains become decided, a sheet should be fastened to the bed-post, and so within reach of the patient that she may grasp it firmly. The nurse should support her feet by pressing a pillow against them. Small pillows between the knees are very inconvenient.

"During the second stage, the patient often becomes fatigued and thirsty. You must imperatively forbid heating drinks of all kinds to be given to the patient. A free ventilation of the apartment should be secured, and as few persons as possible permitted to remain in the room.

"In the second stage of labor more than one examination is necessary, but if examinations be repeated too often, the passages become dry and irritated. *The first object* of the examination is to determine the proportion between the head and the pelvis; *the second object* is to ascertain the exact position of the head; *the third object* is to note the progress made by the head.

"In order first *to determine the proportion*, the finger should be passed, in the interval of the pains, between the pubis and the head, and moved round on either side. The ear can be felt if there be sufficient space for the head to pass, but if the head be high up in the pelvis, the finger can only just touch it.

"If the ear cannot be reached, and there seem to be a disproportion, its degree may be judged by feeling the scalp. When the head is only slightly compressed, the scalp is sim-

ply folded or puckered by the closing of the sutures, as the compression increases, these folds merge into one, which ultimately forms a distinct tumor. This continues to enlarge, so that in cases of *impaction* of the head it is sometimes of great magnitude.

"*To ascertain the exact position of the head*, pass the finger to the sagittal suture. This traverses the presenting part of the head, and looks towards the sacrum. Direct it along this suture towards the left obturator space and plane of the ischium, a fontanelle will then be felt: if it be the posterior (a small triangular space or point where three sutures meet), it is the first position; if it be the anterior fontanelle (a large membranous space bounded by four sides or undefined), it is the third position When the fontanelle is on the right side of the pelvis, the second position may be distinguished from the fourth in the same manner.

"If there be a doubt of, or difficulty in, feeling the fontanelle, the ear will determine the side of the pelvis to which the occiput is applied, the lobe of the ear being felt on the corresponding side.

"You must be prepared to support the perinæum the moment it suffers any degree of distension. Sit behind the patient as she lies upon her left side, the back of the chair being towards the head of the bed, and while the head of the child is passing through the pelvic cavity press moderately *with the left hand* over the hip of the patient. *With the right hand* support the perinæum. A single fold of a napkin should be placed along the edge of the perinæum, and the right hand so applied that the fold of the skin between the fore-finger and thumb should correspond to it, the fore-finger and thumb passing on either side of the vulva, and the palm of the hand resting against a thicker fold of the napkin, applied to the posterior part of the perinæum.

"The perinæum should not *be pressed against too soon;* rather wait till you feel the head protruding with each pain through the vulva. The pains are very unequal, and the object of being prepared to support the perinæum early is to resist too violent distension by them. Support the perinæum against the powerful pains. It is not necessary to press strongly when the pains are weak.

"When the head is passing the vulva, do not draw the perinæum backwards nor push the head too rapidly forwards In either case the widest part of the head would be forced too soon over the perinæum. When the head is delivered, examine carefully lest the funis be coiled round the neck. If it be

a single coil it is sufficient to draw down more of the funis and loosen it. If two or more, one must be brought over the head. When this cannot be done the funis must be divided, which should never be done if it be possible to avoid it.

"When the shoulders are passing the perinæum, caution must be used lest the arms should lacerate it, especially in second positions of the head. Sometimes the shoulders require to be assisted which may be done by placing the forefinger of the right hand within the axilla of the child's arm on the pubic side, and guarding the perinæum carefully with the left hand.

"As soon as the shoulders and thorax of the child are delivered, it can respire, and is so far beyond danger; no haste should, therefore, be used in extracting the body and lower limbs; it is preferable to allow the uterus gradually to expel them, and while it is doing so, the left hand should be immediately applied over the fundus, in order to maintain a moderate pressure upon the uterus while it is descending towards the pelvis.

"Pressure should then be maintained either by a temporary bandage or by the hand of an assistant, and the funis tied and divided. Apply a strong ligature of housewife thread, bobbin, or narrow tape, about two inches from the umbilicus, and a second about an inch further. You must be careful to see the part of the funis you are dividing, lest the fingers or any part of the child should be in your way, and also to examine the cut surface of the umbilical portion. The blood should be squeezed out of the vessels, and the surface wiped with a napkin, for the purpose of detecting any oozing of hemorrhage that might take place if the funis were not properly tied.

"The hand may be applied to the fundus and a very moderate pressure is often sufficient to expel the placenta completely out of the vagina; but if not, it can be drawn out by the funis quite easily, directing the traction in the axis of the vagina. But if the uterus should not obey the stimulous at first, do not persevere; it is always more advisable to wait for some time than too use too much irritation. Neither should you attempt to remove the placenta by the funis alone.

"After delivery, a bandage is necessary to support the pelvis by compressing it as much as possible, and to support the uterus by moderate and equable pressure over the whole abdomen. The bandage should be rather more than a yard long and half a yard wide. It should first be drawn evenly over the pelvis; its lower edge, when so placed, being about an inch below the trochanter. This margin should be drawn as tightly

as the patient will bear and pinned securely below the right trochanter. The bandage should be again drawn and pinned in a similar manner across the crista of the ilium, so that the pelvis may be embraced by this portion of the bandage, about three inches in width, as tightly as possible. The remainder of the bandage should be drawn and pinned with moderate tightness, but equally from the pelvis to the diaphragm, so that the whole abdomen be included in it without projecting over the bandage.

"When the bandage is applied, the folded sheets that had been placed under your patient during labor should be removed and replaced by others dry and warm, in order that she may be induced to sleep. She must not be disturbed afterwards.

"If the placenta be not separated in the first instance, wait for an hour, and again by pressure, excite the action of the fundus. This should be brought as nearly as possible toward the centre of the pelvis, and grasped firmly by both hands. As soon as the fundus becomes hard, strong pressure upon it is generally sufficient to cause the expulsion of the placenta: if it should not, do not use any violence; rather let the nurse, under your direction, maintain the fundus in the same position, while you pass the fingers, and, if necessary, the hand, into the vagina' in order to stimulate the uterus to contraction."

A similar section is devoted to Difficult labors, and another to Obstetric operations.

These Lectures were published before Etherization was introduced into obstetric practice, and of course we have noth ing from the judicious author on that subject. A new edition will no doubt be called for in a short time, and in that we may expect an expression of his opionion relative to the value and safety of the new agent.

The mechanical execution of this work is good. The wood cuts are numerous, and will aid the student essentially in mastering the text.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Puerperal Fever. By Dr. Dawson, of Ohio.—During certain seasons, we see that the proportion of females affected is much greater than in others. As a general rule, this happens when typhus, erysipelas, or something of the kind is prevailing. In hospitals, where the atmosphere is always more vitiated than in private practice, the complaint has always been more frequent. It seems to us, from what testimony we have, that it prevails also more frequently, and perhaps with more severity, in malarious districts, or in localities where the atmosphere is always more or less vitiated, than the other. Besides these suggestions, every practitioner who has had much experience is aware that the complaint at times springs up in his practice in such a way that leaves him perfectly destitute of all means to account for its origin, without referring it to the agency of a vitiated condition of the atmosphere. That contagious matter exists in the gaseous form, and that it is as capable of producing its deleterious effects as well in this form as in any other, is a position so evident that it would be a work of supererogation to insist upon its correctness in this place.

Besides being communicated through the medium of a tainted atmosphere, there are strong reasons for believing that the erysipelatous inflammation of puerperal females owes its origin not unfrequently to a process something like direct inoculation. How otherwise are we to explain the origin of those cases that are exclusively confined to the practice of a single accoucheur, when little or nothing is known of the disease by other individuals practicing in the same department? Mr. Robertson, of Manchester, states that from the 3d of Decem-

ber, 1830, to the 4th of January, 1831, a midwife attended thirty patients for a public charity; sixteen of these were attacked with puerperal fever, and died. He also states that in the same month, three hundred and eighty women were delivered by other midwives for the same institution, but none of the three hundred and eighty suffered in the smallest degree. Facts of this kind might be largely multiplied, furnishing irresistible evidence that something more than mere contagion, operating through the medium of a tainted atmosphere, must be invoked to assist in accounting for the origin of the malady.

It is a fact well settled by numerous observations, that disease can be excited in a system decidedly healthy, by placing any portion of it, from which the cuticle has been removed, in contact with certain substances in a state of decomposition.

The virus of smallpox, we know, when introduced into the stomach, is incapable of exciting its own peculiar set of morbid phenomena. In this situation, it is very probable that it is digested. Brought, nevertheless, in contact with a small puncture of the lancet made on any part of the body, it soon reaches the circulation, and produces its effects by exciting a series of changes or such a transposition in the elements of the blood as is similar in all respects to the one by which the changes were first excited.

Several hundred cases are known in which serious disease and death have been brought about by the use of a certain kind of sausages. In the manufacture of this kind of food, blood, liver, brains, milk and bread are mixed together, with salt and spices, and then put into intestines, and boiled and smoked. It occasionally happens, when the salt and spices are deficient, and the article in other respects is imperfect, that a peculiar kind of decomposition commences at the center of the sausage, and without any appreciable escape of gas, they become paler in color, soft and greasy, and are found to be in a state of decomposition. The disease which follows the use of this poisonous kind of food is of a very singular character: there is a gradual wasting of all the organs and tissues of the body, and the patient, after becoming emaciated, dries into a complete mummy, and dies; the carcass is stiff and but slightly subject to putrefaction. For some time it was supposed that this kind of food contained a certain kind of poison, to which its effect should be ascribed. Chemists, however, have been unable to detect in it anything like an agent of this character. It contains, we are told, free lactic acid or lactate of ammonia, universal products of animal and vegetable decomposition. As a consequence, the deleterious effects are now ascribed to

the condition or state in which the elements are found to exist. Being in a state of transformation, they impart their own peculiar kind of motion to the coats of the stomach, and through the tissues of these organs it is communicated to the blood.

Long since, the profession have been made familiar with the fact that bodies in anatomical rooms frequently pass into a certain state which, is capable of imparting itself to the living body through the medium of the slightest cuts on the hand, and of producing the most serious consequences.

Colin made a number of experiments which clearly prove that muscle, urine, cheese, cerebral substances, etc., in a state of putrefaction, communicate their own state of decomposition to substances much less prone to change of composition than human blood. Placed in contact with a solution of sugar, they cause its putrefaction, or the transposition of its elements into carbonic acid and alcohol.

It is further known that putrefying blood or flesh, placed upon a fresh wound, causes vomiting, disease and death.

How or in what manner all such phenomena are to be explained is one of the questions well calculated to puzzle the most ingenious. By invoking the aid of a certain law, that holds true in several departments of physics, we may approximate possibly towards an explanation. The law to which we allude is, that "a molecule set in motion by any power can impart its own motion to another molecule with which it may be in contact;" and hence the mere contact of any susceptible portion of the system with certain animal matters in a state of decomposition is, if this law holds true, sufficient to excite the same kind of action among the constituents of the blood.

The human organism in a certain sense may be regarded as a chemical compound, made up of elements arranged together according to the laws governing chemical equivalents, and being besides under the influence of the vital force.

Like all other compounds, but not perhaps to the same extent, it is liable to be acted on by certain agents possessing a noxious influence. The blood (which by its nature and constitution is one of the most complex of all the matters of this compound, from the fact that, although not properly speaking an organ, it is nevertheless the sum of all the organs in a state of solution.) has been found to offer the most feeble resistance to exterior influences of any other part or constituent of the organism. This is seen in the function of hematosis, in the

effects communicated by the bite of serpents and the sting of insects.

Having founded these facts on some of the various modes in which disease is excited, the mind easily passes to the consideration of the great resemblance between several of them and the manner in which it is probable that erysipelatous puerperal inflammation is produced.

The state of the parts concerned in parturition, as all know, is raw and abraded; the communication, therefore, of noxious agents with the blood is from this circumstance rendered easy. The interior of the uterus, indeed, as Dr. Furgeson justly observes, forms a large wound, presenting a striking analogy to the surface of a stump after amputation. In contact with this surface the hand of the accoucheur, as all know, is frequently brought. If, therefore, he has been engaged in dressing sloughing sores, or has had his hands in contact with animal matter of any kind in a state of decomposition or putrefaction, what is there in the circumstances to prevent disease from being communicated by a process similar to direct inoculation? We all know with what tenacity the smell contracted from putrefying animal matter clings to the fingers, in spite of the most thorough and repeated washings. Well, while the odor remains, there must remain also the matter that produces it. It may be supposed that the quantity of poisonous matter here is too small; but we have instances in the inoculated smallpox, in the vaccine disease, in hydrophobia, in the viper bite, and in the scratches and punctures of the dissecting room, of the minute quantity of an animal poison sufficient to corrupt the whole mass of the blood, and fill the body with loathsome disease.

The changes which accrue to the organism from contact with the different kinds of virus to which we have alluded, we do not suppose, are all identical in their character. Different kinds of virus, it may be presumed, give rise to different kinds of morbid action, and the same substance in different states of decomposition, we have no doubt, is capable of exciting different grades of diseased action. All the morbid changes which have been excited by bodies which themselves are in a state of change, as far as we can see, might be generally termed putrefaction; for whether taken in its popular or technical acceptation, this term signifies nothing more than a natural process by which animal and vegetable matters are disorganized, or a disturbance of the equilibrium between the chemical and vital forces by which the former holds the predominant influence. The term fermentation, which signifies an inter-

stitial movement in a body, whence result certain substances that did not previously exist in it, may express a process that has a still closes analogy to the one under consideration.

Upon these views, however, we do not design to insist, further than merely to suggest them for consideration, believing, as we do, that in relation to the intricate subject before us, they are the most plausible that can be proposed.—*Proceedings of Ohio Medical Convention.*

Nature of Intestinal Secretions in Cholera.—The rice-water secretions in cholera have hitherto been looked upon as composed of the elements of the blood, albumen and serum being asserted to exist in the fluid portion, and fibrine in the solid parts. Chemical observation has now demonstrated to Prof. Andral the fallacy of this opinion. The fluid contained no albumen whatever, and the white grains floating in the liquid were not constituted by fibrine. Examined by the microscope, these particles presented the appearance of pus globules, but still they were not purulent. In the blood, albumen was found in its natural proportions. The learned professor concluded by stating as his opinion that the choleric matter consisted only of a modified mucous secretion.—*Med. Times. Aug.* 21, 1847.

Sketch of Burmah and Medical Science among the Burmese. By J. Dawson, M.D., formerly of India.—Burmah presents to the eye of the traveler, the philanthropist and man of science. diverse characteristics, which are as interesting as they are curious, and seem generally unknown to most of the enlightened nations of the earth. As an independent Asiatic sovereignty, with borders and boundaries tolerably well defined, it is a pretty considerable dominion, and is bounded on the north by China, on the south by Siam, on the east by the independent Shan states, and on the west by the territory and bay of Bengal.

It is esteemed as being well supplied with a proper proportion of hills, mountains and valleys, small lakes, extensive rivers and springs, with plenty of excellent timber, and inexhaustible stores of geological and mineralogical productions.

Vegetation is luxuriant, and both crops and fruits, when cultivated, are abundant. In a word, the country is rich in the possession of all the natural resources necessary for the support of an overflowing population. But from the peculiarity of the government, the nature of the climate, and other causes, it contains nothing like the amount of people which it could decently maintain. The entire population, including Talines, Karens and Burmans, numbers about fifteen millions.

Its greatest geographical extent runs north and south, and is over eight hundred miles. Within this range of latitude, stretching some degrees beyond the tropic of Cancer, you have the extremes of wet and dry weather. To the north it is dry, the land in the neighborhood of Ummeerapoora, the capital of the empire, being irrigated principally by periodical inundations of the Irrawaddie river. To the south it is wet, as much as two hundred and forty inches of rain falling during the year, two hundred inches being the average quantity.

The government is a despotic monarchy, the king having complete control over the life, the liberty and property of any of his subjects. In his hands are the reins of absolute power, and he confides them to whom and how long he pleases. The name of the present sovereign of the kingdom is Tharrawaddie. [Intelligence has just reached of the death of this king.] He usurped the throne in 1837, and won the sceptre by deeds of blood. His several official titles are, "His Golden-footed Majesty," "King of the Rising Sun," "Lord of the White Elephant, reigning over Thoonaparanta, Tampadeepa," and many other great countries.

As a nation, the Burmese are usually classed among the half civilized races of the world. The people individually are humane, hospitable, and destitute of bigotry; but as a nation, they are proud, arrogant and self-sufficient. They have regular laws, both religious and civil; they have a literature and an established national faith. In their numerous books, called the *Beedaghat* and *Dematha*t, are contained the prescripts of their sacred and judicial institutions.

Gaudama is their divine lawgiver; he was their last incarnate deity, or bhood. He died, it is said, of a diarrhea, produced by eating pork. In some of their religious temples, he is represented as lying on a sick couch, with a doctor standing near him, having a pill between his fingers, and just ready to be administered as he fainted and expired. It is disrespectful to his memory, as well as positively sinful, to say that he is *dead*. Having entered *nike ban*, or the state of annihilation, he is regarded as no longer existing, either corporeally

or spiritually. Believing in the transmigration of souls—of the passage of a spirit from one form or body into that of another, or the spirit of a man entering into that of an ox, a dog, or a cat—of a fish becoming a fowl, and a fowl a reptile—ultimate annihilation is the consummation of all their hopes and expectations in reference to eternity. During these almost endless peregrinations through the universe, in worlds unnumbered and unknown, the doctrine of personal merit is conspicuously held up to view. Do good and you will get good, is the old adage with them; do evil and evil will recoil back upon your own head. By doing well they may be advanced to the dignity of angels and of gods; by doing ill they will be degraded to the level of fiends and fierce serpents.

Thus the religion of the empire is Bhoodism. Unlike the Brahminism of the Hindoos, which is a cruel system of personal torture and bloody sacrifice, it is a humane system, based on certain laws, doctrines and precepts. It supports a priesthood, and directs the building of magnificent temples and costly pagodas. It forbids the spilling of blood, even to the killing of a fowl, though monarchs have reveled in the slaughter of their unhappy victims. Contrasted with other forms of paganism and heathenish creeds, it might be considered as the mildest in principle, and the most humane operating system that could have originated in the mind of a mere man, unaided and unguided by any light drawn from the Christian religion. Some of their sacred laws are precisely analogous to those of the decalogue recorded by Moses in the book of Exodus; four of them are exactly similar in import, which prohibit killing, stealing, lying, and adultery.

The institutes of Menu constitute their domestic and civil code. Their criminal laws are very arbitrary. Decapitation is the common mode of executing malefactors; but on extraordinary occasions, emboweling, crucifixion with the head downwards, a horizontal division in a wedged position by a saw into halves, tearing to pieces in quarters by elephants, have been cruelly and disgustingly practiced.

Their books are not prepared of paper, but are formed of bundles of palm leaves secured together upon a string. The writing is traced upon them by an iron point, stiletto, or pen.

The Burmese language appears to be derived from the *Pali*, which is one of the ancient sacred languages of the east. Being composed chiefly of guttural, palatal and nasal sounds, the spoken language is not mellifluent, but full, difficult and harsh to the ear of a European.

In stature, the people are short, muscular, and firmly built.

In movements, the women are graceful. The men sometimes at particular feats are very energetic and sprightly, but ordinarily they are slow and inactive. Boat racing is a favorite exercise with them, and forms one of their great annual festivals. Few of them can be called stout or fat. The color of their complexion varies from a light golden yellow to that of a blackish, brown. The very darkest of them is much lighter colored than a genuine African.

From the following particulars may be obtained a good idea of their physical proportions. It is an average of twenty-five men who were examined for admission into the ranks of the Local Corps, serving in the Tennasserim provinces, under the jurisdiction of the English government.

Mean age of these individuals was twenty-four years;
" height, - - - five feet three inches;
" weight, - - - 114 pounds.
" Size round the chest, thirty-two inches.

Rice is emphatically the staff of life in India. Some condiment in the character of a curry is generally used with it. Many of the natives prefer a piece of roasted salt fish, with a sour vegetable, or fruit, to eat with the rice. They drink no coffee nor milk, and very few Burmese take tea. Tea, however, is very frequently cooked up as a vegetable, with garlic, onions, etc., and is prized as a delicacy. It is the customary offering when an application is made by a young man for the hand of a young lady in marriage.

The existing records of their ancient literature comprise many works on astronomy, astrology, metaphysics, history, chronology, and medicine, besides some tables of the minor mathematics.

Medicine as a science is neither taught in schools nor studied under private teachers. The profession has no medical colleges whatever in the country, and public hospitals are among the things which are yet to be founded. The people have none of the means nor appliances possessed by enlightened nations for the acquisition and cultivation of this branch of useful learning.

The healing art is comprehended just about as well by the Burmese practitioners as it was by the bold, ignorant empirics of Greece who practiced before the time of Hippocrates. The most celebrated medical writer among them was *Zeewaka;* he was a disciple of Deethapamoukka, and flourished about 550 years anterior to the Christian era. To him are attributed many valuable treatises on medicine. His works, however, are nearly all lost, but his reputation is still cherished for his

great learning and wisdom. For a knowledge of anatomy and mineral medicines he was eminently distinguished. Without striving to emulate his wisdom, his followers are content to revere him for his sagacity, admire him for his knowledge, and applaud him for his success. Since his days, there have been many inferior writers, but none of any note within the period of modern times.

In questions of doubt or difficulty which may arise, it is a fundamental rule of the profession to refer everything to the authority of an ancient author; his opinion was so and so, and this is deemed enough. Possessing such a veneration for the ancients, and the fraternity apparently resting satisfied with what has hitherto been accomplished, has given rise to certain corruptions of these early writings. The practice of lauding to an extravagant degree these professional heirlooms, descending from previous ages, and, like the laws of the Medes and Persians, considering them unalterable, none having the moral courage of publicly advancing and vindicating any new theory that might occur to them, furnished some wily, ingenious authors with opportunities of engrafting or adding their own supposed discoveries upon the original works of the old practitioners, whose writings, to the regret of all, have thus become garbled and filled with spurious passages.

Subjoined is an extract from a work which professes to be a treatise on anatomy, and claiming for itself a divine origin:

"The fœtus consists of thirty-two parts; its height becomes six feet; the hairs of the head are 25,000,000 in number, those of the body 99,099,000; the nails are 20, the teeth 32; the cuticle which covers the skin of the body (when rolled up) is the size of a cherry; the muscles are 900, the arteries 900, the veins 17,000, the bones 300, the joints 300; the bones are filled with marrow and sperm. The bones are distributed as follows: 9 in the upper skull, 1 in the forehead, 1 in the nose, 2 in the eyes, 2 in the ears, 2 in the jaws; the teeth are 32; 1 bone in the chin, 7 in the neck, 2 collar bones, 2 shoulder bones, 4 in the lower arms, 64 in the hands, 14 in the breast, 24 ribs, 1 in the middle of the lower breast, 18 in the back, 2 hip bones, 2 posterior bones, 4 thigh bones (so in original), 4 bones in the legs, 4 knee bones, 4 bones in the heels, 64 in the feet, 64 soft smaller feet bones; there are also 100 more attached to the inner bones."

According to this arrangement of the osseous system, instead of 300, there are 434 distinct bones in the human body. If you were to point out the discrepancy between the two statements, it would only excite a smile. The mistake would

remain unaltered and be perpetuated, because the physician could not say whether the one or the other was right, or whether both numbers might not be wrong.

Thus in anatomy all is ignorance and mystery. The mists and mazes of antiquity, with all its glorious uncertainties and boastful pretensions and authority, remain to be swept away. After this first step has been taken, then a lasting foundation might be laid from imported European and American medical science.

Chemistry is still a sealed casket of jewels, which possibly it will be the happiness of coming generations among them to see opened. Its beauties, even under the most common elementary forms, have yet to be unfolded and exhibited. An occasional pretender, however, has stepped on the platform of public notice, and declared with much vehemence that he has both seen and done wonders in the sublime and much vaunted science of alchemy. But like the philosophers of old, who have endeavored to effect the transmutation of metals, and to discover a universal elixir for curing the whole round of human maladies, and for conferring longevity upon man, their names, their experiments and all have justly been allowed to sink into the shades of a long forgotten world of nonsense.

Of surgery they positively know nothing. Even the simple operation of phlebotomy they cannot, they dare not perform. When men have come begging to be bled, I have just inquired, why don't you go to your own doctors? The reply was: "*O! thu nama lay boo, theken;*" that is, they know nothing about it, sir.

Among the domestic customs of the Burmese is that of boring, at an early age, a hole through the lobe of each ear of both sexes. These holes are gradually enlarged by the introduction of successive pieces of thin twigs, till at length they become sufficiently large to admit a finger. In them, on particular occasions, gold ornaments are worn, or a bit of amber, glass, or polished marble. But the workmen or coolies often insert their segars in them for convenience. Occasionally the lobe gets divided or broken by some accident, when the man becomes filled with shame at his misfortune, or, if it be a woman, it is even worse. They will conceal it as though it were the greatest deformity they could suffer. They will do anything in the way of trouble to have it united, but their own medical men are unequal to the task of helping them. In such cases, when they can, they apply to a foreign physician to join it by suture. Without flinching, they will sit to have

it done; but if it were to perform any other operation, however trifling, except in a very few instances, the very sight of a lancet, scalpel, or pair of surgeon's scissors, would strike terror into them.

In old chronic swellings and tumors, they may, and sometimes do, in extreme cases, where there is much personal fortitude and courage, slightly scarify the part affected with a rude-pointed, rough-edged knife, or resort to actual cautery with a heated iron. At times, too, a few leeches or a blister is applied; but they never, as a general rule, make more than one application of this nature.

Midwifery is practiced by old women, the men having nothing to do with it, unless to give a dose of medicine when needed. The manual part certainly could not be monopolized by more dangerous hands. As a specimen of their treatment, it may be mentioned that when any sort of obstruction arises, the most cruel methods are pursued for overcoming it. From the roof of a house a long band is suspended, after the fashion of a swing, the female is placed upon it, her face looking to the floor, and urged with all her might to press downwards to force away the child, her back being pressed at the same time with the knee or foot of one of her sweating attendants. If this does not prove effectual, she is stretched upon her back, and is squeezed laterally along the sides by the hands of two old women, while a third places the heel of her foot on the abdomen, and thus makes pressure. Astringent and other washes are injected into the vagina with an instrument made of zinc and lead, resembling a miniature cannon, having rounded trunnions by which it is grasped, and an ornamental piston rod. The sufferings of the poor injured woman no language can adequately portray. As might be expected, all such cases terminate in death; happily they are not very numerous.

From time immemorial it has been the practice of these people to subject their women, after parturition, to a species of roasting for several days. Within the tropics, the heat at a certain season of the year is almost insufferable. To a high temperature is added a blazing fire, a few inches from which the parturient female is placed in a bed upon the floor, where she is kept for at least eight or ten days. After the birth of the child, she is rubbed all over from head to feet with a stimulating yellow turmeric paste, to prevent her taking cold. The effect of the fire is said to excite secretion, and drain away all the noxious and impure fluids of the body.

Their notions of the development and growth of the fœtus are singularly crude, as displayed in the following quotation:

"At first the fœtus is only water, not larger in the parent's womb than the drop detected with difficulty at the point of a hair of that sleek animal, the hyena, after it has been immersed in oil clarified a hundred times, and from which the oil so taken up has been shaken one hundred times. The fœtus, which is thus nothing but water, having become froth, (in this unchangeable way does it happen,) afterwards enters its third stage, and receives life and form; then the living fœtus becomes blended in its fourth stage; the two hands, the two feet and the head are produced, and branch off into five extremities, the hair of the head and of the body, the ears, the eyes, and the nose, are then formed."

The whole process is this: first, water; second, froth; third, life and form; fourth, the branching or growing out of the different members as from a common center, which seems to be the trunk; and the fifth stage including the perfection of the head and the several limbs.

The periods of development here follow:

"The fœtus in its first stage of water is produced in fifteen days; its second stage is formed at the termination of one month; the third at the end of the second month; the fourth at the end of the third month; at the conclusion of four months, it branches forth into five extremities; at the fifth month, the eyes and other members of sensation are formed. The fœtus remains ten months (300 days; 294 according to others) within the parent's womb, and after remaining there as in a repository, it comes forth."

The Burmese say that man is formed of the four great elements of earth, fire, air, and water.

"There are four elements of which the human frame is composed: the first is earth, the second water, the next fire, the last air; and in this manner are they distributed: there are twenty portions or members formed of earth, viz, the hair of the head, the hair of the body, the nails, the teeth, the cuticle of the skin, the flesh, the veins, the bones, the marrow of the bones, the lungs, the heart, the liver, the spleen, the stomach and the bowels, both large and small. Twenty-two parts are formed of water, gall, phlegm, pus, blood, sweat, indurated oil, tears, liquid oil, spittle, mucus, gluten, urine. Of fire there are four parts, viz, the embryo of fever, the principle of producing age, the embryo of melancholy, and the principle causing digestion. Of air there are six parts, the principle which occasions belching, that causing a breaking of wind, the embryo of disease in the stomach, the principle of circulation."

The practice of medicine seems to be followed only as an empirical art, and is mixed up with considerable superstition, sacred and vulgar. The following is an example of the rules which guide them.

"If a physician is called to attend upon a patient who lives to the south of his house, that person's disease cannot be healed (by him:) if the patient resides to the southwest, he can be cured in three days: if to the west, the complaint can also be gradually cured: if to the north, the patient will not completely recover: if called from the northeast upon Tanen-la (i. e. Monday,) he must not attend; if from the north, the sick person will not recover; if called from the east on a Monday and presented with a liberal fee before going, the patient will recover in three days, if the spirit be propitiated by an offering of food placed on the east side of the house. There is sometimes a pulse felt between the thumb and index finger of the right hand, at such times the subject is under the influence of witchcraft, the disease therefore is not a real one; boiled rice, fried fish and fragrant condiment being placed on the north side of the house, as an offering to the spirit, the complaint will disappear. When there is a pulse in the middle joint of the right thumb, beware! it is the work of a household evil spirit to cause dejection of mind. When there is a throbbing pulsation in the fourth finger, the intellect of the person is obscured, and the body is parti-colored; a witch and the household spirit possess the person. When the blood-watchers of life (the pulse in the wrist and foot) vibrate strongly, it is caused by an evil spirit: when they cease to beat, refrain from administering medicine—life is departing."

As the foregoing instructions to medical men are believed to be enjoined by divine authority, all reasoning as to the fitness or utility of the proposed cures is at once superseded. Their mystical influence, has become deep-rooted, from the acknowledged authority of accumulating ages, and though seemingly puzzling as a fact, that such a palpable chain of errors could have so long maintained its power, without a spirit to investigate, or a struggle to overthrow it, yet, unlike the gordian knot of the famous Phrygian chariot, it must be confessed that no Alexander has ever risen to cut it, and enfranchise the mind.

Every Burmese physician is strictly an empiric. Though some of them are conversant with a long catalogue of simples, still they have but one or two remedies for each disease, and when these fail, their skill is at an end. They appear unable understandingly to adapt means to ends. All is blind

chance. In the use of the articles of the materia medica which they employ, they manifest but little judgment, and betray an imperfect acquaintance with their real virtues. Their manner of administering mercury, and other mineral medicines which enter into their materia medica, is open to the same objection.

In relation to nosology, the whole circle of diseases is embraced under two grand classes. Their books of medical practice assert that "of the diseases to which the human frame is liable, there are ninety-six. Of which sixty-eight are wind complaints, and twenty-eight gall complaints. According to some others, there are eighty of the former, and sixteen of the latter." Symptomatology, which is the basis of good practice in any country, is but little understood. The meaning of symptoms, the difference between cause and effect, can hardly be intelligible, where there is such a notorious want of correct anatomical knowledge.

It is not a little amusing to witness the exploits of most of these warriors of physic While a few of them appear to be deeply read in works on medicine, such as they are, and are otherwise generally intelligent, the mass are without a particle of book knowledge, and as ignorant almost as an untutored Indian. But there is this to be said in extenuation, that books are rather scarce with them, just as it was in Europe some two or three centuries ago, before the more general introduction of printing. A number, however, are collected together in some of the older Kyoungs, or monastries under the charge of the Bhoodist priests, where they are piled up for preservation as relics of the past, in large boxes, which are richly ornamented for this particular purpose.

The great field of medicine in Burmah, as in most other oriental countries, being entirely without any sort of barrier, or fence, in the shape of a legal test, or collegiate trial, every simpleton that pleases may ramble into its alluring precincts, to try his fortune. The only requisites for the office, are a brazen face, a flippant tongue, and a bag of drugs. If a Burman conceives to himself a desire to execute the functions of a doctor, he begins to practice at home. The first two or three cases are generally members of his own family; and having tried his ingenuity, he has perhaps been successful. As may be supposed this success is highly encouraging, and prompts him to march forward in his new career. The cases were probably such as would have turned out favorably without any kind of treatment. But this circumstance has nothing to do with it. In due time, after these astonishing tri-

umphs have been achieved by our adventurer, friends in the neighborhood call to make a visit. A story is got up relative to these wonderful cures that the new doctor has effected. Beating their breasts, the old folks look amazed and thunderstruck, and sing out, "*a mai, a mai*," oh me, oh me, how wonderful! Assuming an air of dignity and an apparent earnestness, the "*Sa tha mah, theken*,"—["*Sa tha mah*" literally means doctor, or master of medicine. "*Theken*" is a term of respect, and signifies friend, sir, master, or lord.]—for such now becomes his title, attempts to explain the nature of the disease, and above all how easily it could be managed in his hands and by his medicine. All this great matter is of course borne in mind by the visitors. Shortly after the doctor receives a call to see a sick person residing at the other end of the town. If he happens to think that the fates are not against him, he goes, but should the time be unpropitious, he declines and waits for another patient.

Having thus entered the professional sphere, the gentleman has to bestir himself, to look dignified, and furnished with drugs like a regular master of the healing art. A bag to throw over the shoulder is provided. This is to carry with him all the medicines he requires when going to visit the sick. His stock, which is contained in the cotton bag, mostly consists of a little brimstone and some bluestone, some mercury and crude antimony, a small lump of opium, a few bitter and aromatic roots, some powdered spices, as cloves, cinnamon, black pepper and ginger, either mixed or separate in small tin boxes, a little garlic and capsicum, a hog's tooth or two, or a couple of teeth of some wild animal, the claws or nails of a tiger, a flat piece or two of metal, some cotton and woolen strings or thread of different colors, (all the latter are to apply as charms,) and a China cup or two for giving medicine. In the majority of instances this enumeration comprises the whole drug establishment of the native doctors of that country. There is, however, a class of druggists to be found in the public bazaars, who keep a larger and more varied stock, and sell to the practising physicians and quacks.

When summoned to visit a patient, the practitioner makes the person sent sit down and give some account of the case. Having thus learned a few of the particulars, a fee is demanded in advance to buy medicines. A message is then returned to say that the physician will be in attendance presently with his remedy. Reaching the house, he steps in, and walks right up to the sick man. There is no ceremony of bowing and scraping observed, as may be seen in some more

civilized parts, and no compliments are exchanged of wishing "*good day*," &c. The doctor sits down on the floor, by the side of the individual, and proceeds to feel the pulse, looks into the eyes, nose, and ears, and sometimes into the mouth. Whether the mouth is omitted in the examination intentionally, or from neglect, I have not heard. But as the whole nation, without exception, chew the beetle leaf and nut, with slacked lime, tobacco and catechu all mixed, it keeps the mouth constantly stained of a red color. Crusts form on the teeth from this habit. Very seldom a question is asked in reference to pains, aches, &c. The esculapian is supposed, or pretends to know all about them from the pulse. The wonderful pulse, according to his theory, tells everything, and in all certainty he understands nothing whatever of the circulation, and but little of the internal structure of the human economy. How can he, it may be inquired, for he has *never seen* the inside of a dead body, i. e. the person of a man or woman.

The amount of their written information, (and this as we have already seen, is known only to a few of them,) respecting the several organs, is exhibited in the extract given below, taken from a book on anatomy, there being no work extant on the specific subject of physiology.

"The heart in shape is like the bud of a water lily; it lies with the point downwards, having three folds at the lower end, and is situated in the middle of the breast; it contains about a handful of blood."

"The liver of a *wise man* is thin and divided into three lobes: the unwise have large deformed livers: the liver is on the right side under the heart."

"The first spleen is in contact with the bowels; it is eight fingers in length, and in shape is like a cow's tongue. The second spleen is on the right side of the liver."

"There are three kinds of lungs, red, black, and spotted; they are situated in the breasts above the liver, and are in shape like the fruit of the "*thapan*," (mirobalans.)

"The intestines of a man are thirty-two cubits long, those of a female twenty-eight cubits; they are coiled up in twenty-one folds below the opening of the breast."

"There are two descriptions of gall; one is contained in a bag, in contact with the liver; the other is diffused through the whole body."

"The human frame is also filled with pus."

"Perspiration exists in the orifices from which the hair grows."

"The spittle flows from the pouches on each side of the jaws."

Here is a specimen of jumbling of the most finished touch. The liver is again honored by having allotted to it the lodging place of wisdom. The first spleen must be the pancreas, but how the spleen itself could be assigned to the right side it is not easy to conjecture. The urinary organs seem to be entirely overlooked in this description.

But we must follow the doctor in his practice. Shampooing is a favorite auxiliary in the treatment of disease. It is put into operation at once. The physician himself squeezes away in every direction; hands, arms and shoulders, feet, legs and thighs, as well as the trunk, all get a share of attention. A dose is then administered to the patient, mixtures being more commonly given than pills. The nostrils are then plied well with some aromatic powder. Next, a charm is formally applied to the neck, wrists or ankles. Certain offerings are proposed to be made to the "*nats*" or evil spirits. And whether fever or inflammation be present, exhaustion or languor, or anything else, it matters not what, the patient must be stuffed, as a part of the treatment, with quantities of boiled rice. It is given in boluses the size of a peach. The doctor, looking very grave and stern, informs the sick person and his friends, that "*unless he eats he must surely die.*" The whole proceeding, from first to last, would be regarded by a lover of the stage, as a beautiful farce, divested of all appearance of a plot, but full of action and droll amusement.

The treatment pursued is highly stimulating. Emetics and cathartics are very rarely used. There is a horror of having the bowels moved freely. When the natives seek the aid of a foreign practitioner, they often inquire whether the dose he gives will purge. Frequently the dose has been handed back, when told that it would, with a very significant nod of the head and the exclamation, "*Ah! ma kom boo,*" which means, *Ah! that's very bad.*" Their last deity having been carried off in consequence of a looseness, seems to awaken in them a strong suspicion in relation to the fatal nature of free abdominal evacuation. In addition to this historical circumstance, their own purgatives are of the most drastic, violent character, and being oftener administered without, than with, either judgment or caution, is perhaps a sufficient cause to create a general dislike to them among the people. Though this is the popular opinion of the present age, it was not the universal rule of antiquity, as is manifest in some of the old treatises on practical medicine still extant, in which they figure in com-

mon with other things. In combination with a number of stimulating ingredients, their formula for certain compound preparations occasionally display the presence of some active cathartic article.

A composition of this sort is presented in the following recipe. The prescription as recorded, is directed to be employed in bowel complaints and pains in the abdomen. It betrays the exciting nature of the remedies, to which they were and are still accustomed to resort.

"Capsicum, - (Bird-eye pepper)	fruit,	(quantity illegible.)	
Piper longum, - - - - -	" -	100	grains.
Amomum Zingiber, - - -	root	100	"
Allium Sativum, - - - -	"	100	"
Anethum fœniculum, - - -	seed	100	"
Croton Tiglium, - - - - -	"	10	"
Gentiana Chirayita, - - -	root	10	"
Myristica, - - - - - -	fruit	10	"

"A quantity of Cactus triangularis to be sliced, the juice drawn from it and thrown away. The remaining part should be added to the above, and both well triturated together. To be taken in quantities of ——* grains when required. Previous to taking this medicine, it must be dipped in salt."

Besides the efforts of the regular practitioners thus put forth in behalf of the sick, the agency of quacks and silly old women is sought, when the illness of a person is supposed to depend on mischief perpetrated by imps, wizards, hobgoblins and evil spirits. All kinds of mental alienation and disorder are laid at their door, as likewise diseases of a lingering character. The women thus called upon to exercise their craft, for the removal of these imaginary phantoms and spirits, would remind one very forcibly of the poor creatures described by writers on "Demonology," that were burnt as witches and wizards in Scotland and England, during the reign in those countries of superstition, religious intolerance and persecution.

The ceremony for dislodging these pernicious invisibles is somewhat ludicrous. A sort of shrine, with silver and marble images, leaves and flowers, is erected on a raised platform of bamboos. Before it are deposited the different offerings, in cups and on plates. An elderly female is dressed up fantastically, in tattered garments of singular shapes and colours, and decked out with wreaths of flowers and feathers. She holds in each hand a long sword; and in front of the shrine, cutting all manner of antics and capers, she dances to music.

*The quantity directed to be given is not legible in the original.

This mystical ceremony is sometimes prolonged through the period of a whole day and night, or a couple of days, by the appearance now and then of the female referred to, and of a succession of comical fellows, who dance in the same way, and kick up no uncommon kind of shindy. By looking at them, one is irresistibly led to exclaim, O what stupid infatuation! What worthless folly of concerted phrenzy and vain hope!

To judge from what an observer will witness, relative to the feeling entertained by the people, toward their own medical men, the conclusion is that they do not appear to have any great confidence in their skill, or modes of practice. The Burmese are indeed very fickle in this respect. They somewhat unreasonably desire to see *speedy* results for good, follow the employment of medicinal means. They soon become discouraged, and quickly relinquish hope, if such do not turn up. At times as many as a dozen practitioners may be called in attendance on a case, in the course of a single day, and dismissed one after another, as soon as each one has administed his dose. If the patient die while the last physician is in the house, *he gets the name of having done the business.* His predicament then is anything but agreeable or pleasant. The poor fellow sneaks out, amid the noise and lamentations that are raised, as if he had by some unhappy blunder really committed a murder.

The Burmese burn their dead. Young children alone are buried. Ordinary funerals are solemnly grand. In burning a priest there is great display made. In speaking of the decease of aged persons, they compare it by a figure of speech which they use, "*to the dropping of ripe fruit from a tree.*"

Here I must close the subject, not because it is exhausted, but from an apprehension of wearying my readers. Imperfect and rambling as this sketch may seem, an inquirer can gather from it *some* of the more prominent facts connected with the present state of Medicine in that interesting kingdom of Asia.

Note. The translation from Burmese into English of the several passages quoted in this paper, was made by a gentleman distinguished for his acquirements and knowledge of the literature of that empire.—*Medical Examiner.*

Diamond Converted into Coke.— Dr. Faraday exhibited some diamonds which he had received from M. Dumas, which had, by the action of intense heat, been converted into coke.

In one case, the heat of the flame of oxide of carbon and oxygen had been used; in another, the oxy-hydrogen flame, and in the third, the galvanic arc of flame from a Bunsen battery of a hundred pairs. In the last case, the diamond was perfectly converted into a piece of coke, and in the others the fusion and carbonaceous formation were evident. Specimens, in which the character of graphite was taken by the diamond, were also shown. The electrical character of these diamonds was stated also to have been changed, the diamond being an insulator, while coke is a conductor.—*Transactions of Brit. Association.—Jour. Franklin Institute.*

Medical Heroism.—Under this caption, the *Annalist* copies the following from an article in the *British and Foreign Review*, with appropriate comments. It is a sublime but just picture of genuine medical character.

"There are few of our readers who do not remember the melancholy impression made on the public mind by the disastrous expedition to the Niger, when this was made known in England, through the newspapers. And none, who remember this, can forget that pathetic passage in the story, which represented the noble conduct of the surgeon and the geologist of the expedition, when left alone in the far recesses of the Niger, amid their heroic companions, all stricken to death, or to death-like helplessness, by the fatal fever of the country. In this trying conjuncture, when the salvation of all on board depended upon the speedy removal of the ship from her actual position, Dr. M'William took the navigation on himself, steering with his own hands, and piloting the vessel through all the intricacies of the river, while his companion worked the engine below. There is something affecting, we had almost said, sublime, in the picture thus presented to the imagination, of these two solitary men of science, assuming offices so foreign to their past habits and knowledge, stripped of all exterior cognizance of their class, standing as humble workmen at the helm and furnace, toiling by day, watching by night, while the force of the stream and paddles were sweeping their ill-fated bark, freighted with their dying or dead companions, through the manifold dangers of their unknown course. The author of the volume before us, (the Report on the Boa Vista Fever,) was the clear-headed and stout-hearted pilot who did this, the undoubted preserver of the ship and her surviving crew; and the slight and simple way in which

he speaks of his own exertions, strikingly illustrates the old truth, that 'the brave is ever modest.'"

The following dispatch and accompanying remarks, which we extract from the North American of a recet date, show that the same traits characterize the honorable members of our profession everywhere.

Martyrs to their duty.—The crowded state of our columns has prevented us from commenting upon the following dispatch received at the Navy Department from Com. Perry.

U. S. Flag Ship Germantown, Vera Cruz, 6th September, 1847.

Sir:—I am again called upon to announce to the Department the death of another valuable officer of the Squadron—Passed Assistant Surgeon J. Howard Smith breathed his last yesterday at the Naval Hospital.

The death of this and the other Medical Officers, may in part be ascribed to the extraordinary anxiety and labor to which they were subjected in their attendance upon the sick; worn out in body, though not in zeal and courage, they had not sufficient strength to bear up against the effects of disease when it came upon them.

Doctor Smith was attached to the steamer "Spitfire," and volunteered with Doctor Hastings, of the "Mississippi," to take charge of the sick at the Hospital, when Dr. Thornly was taken with the fever.

Words cannot express my feelings on seeing these devoted men, stricken down as they have been by the epidemic, from the fatal malignancy of which their own incessant labors and watching by night and by day have saved so many.

As a proof of the noble self-devotion of Dr. Hastings—an example worthy also the character of his lamented companion, Dr. Smith—I subjoin an extract from the "Sick Report" of the 30th ult.

I have the honor to be, with great respect, sir, your obedient servant, (Signed) M. C. Perry,
Commanding Home Squadron.

To Hon. John Y. Mason,
Secretary of the Navy, Washington.

Both the gentlemen who are the subject of the above feeling eulogy, are Philadelphians, and Mr. Smith leaves many to regret his loss—while that regret is solaced by the reflection that he fell when nobly and gallantly engaged in the performance of his duty. It is not alone amid the roar of cannon and the thick smoke of a deadly combat that true courage and manly devotedness can be found. The physician who faces the horrors of infectious disease, and hovers like a ministering

angel around the couch of death, achieves a triumph equal to that of the victorious battle field. As soon as Dr. SMITH was taken down, Dr. JOHN HASTINGS made the following tender of his services in a report dated "U. S. Naval Hospital, Salamandina, August 30, 1847."

"Aware of the diminished number of Medical officers in the squadron, and fearing you might be worried and perplexed on account of the sickness of Dr. Smith, I conceive it my duty to say that I feel myself able to take charge of the sick at present on the island, (number of sick in hospital 124,) and all who will be likely to come. Having been on a previous occasion, from similar misfortunes, called upon to discharge as heavy and important a duty as the present without succumbing, I hope I shall in the present instance again be equal to the task.'

While engaged in the duties which he had thus assumed, Passed Assistant Surgeon JOHN HASTINGS was himself attacked by fever and for a long time his recovery was doubtful. Providence, however, interposed, and he has been preserved for other duties and other missions of self-sacrifice and devotion. Well may we feel proud to enrol such gallant spirits among the sons which Philadelphia has sent forth to the war. Tears for the departed one, and the encomiums of the public upon the survivor, are but feeble evidences of the estimation in which they are held. Dr. SMITH sleeps the sleep that knows no waking, while Dr. HASTINGS will soon be restored to the friends whom he has made so proud of him, and we trust his return may be accompanied by some expressive token from his fellow-citizens."

The following notice of the late Dr. Kearney we also take from the North American. We had the pleasure of Dr. K.'s acquaintance and friendship, during several years that he was stationed at Philadelphia, and can bear witness that the eulogy of his brother officers is not strained. It will be seen that he met his death in the *voluntary* performance of a most hazardous duty. Dr. Kearney's age and long service exempted him from so arduous a task, but his sympathy for his brother soldiers prevailed over all considerations of domestic ease and comfort, and even his own health and life, and, like those whose names we have already chronicled, he fell a sacrifice to what he deemed his professional duty.

NAVAL.—The Officers of the Navy attached to this station, and others now in Philadelphia, met at the Navy Yard, on the 22d inst. Commodore CHARLES STEWART was called to the Chair, and Purser ROBERT PETTIT appointed Secretary.

The Chairman, in a short and feeling address, stated that they had convened for the purpose of offering some testimonial of respect, to the memory of a brother officer, Doctor JOHN A. KEARNEY, late "Fleet Surgeon" of the Home Squadron, who died on the 27th of last August, at Salamandina, in the Gulf of Mexico.

A Committee consisting of Surgeons James M. Greene, W. S. W. Ruschenberger, and Purser Robert Pettit, was appointed to prepare a notice and resolutions, expressive of the sentiments and feelings of the meeting. The Committee reported the following, which was adopted:

We are impressed with no common feelings of sorrow, when we reflect, that only a few short weeks have elapsed, since the lamented subject of this notice, was on duty with us, in fine health and spirits, and with every prospect of a long and useful life; and that now he is numbered among the last victims of that disease, the fell scourge of strangers within the tropics!

We cannot permit an occasion so melancholy to pass, without a slight tribute to the memory of one with whom most of us have passed many happy hours, in our varied duties of a life at sea; or amid the social circle, with our friends on shore.

Doctor Kearney entered the service at an early age, and during a career of nearly forty years, passed with distinguished honor through the various ranks of the Medical Corps of the Navy. He served as Surgeon's Mate, Surgeon, Member and President of Medical Boards, and Fleet Surgeon of different Squadrons.

In the war of 1812 he was Surgeon of the Frigate Constitution, in her triumphant encounter with two of the enemy's vessels and a larger force.

The deceased was a warm advocate for strict discipline, and willingly showed the utmost deference for those whose rank or seniority placed them in command—while he used every honorable means to promote the consideration which he believed was due to skilful and well instructed medical officers. Nor was he less strenuous in his efforts to advance the interests of others in the different departments of the service; and in 1835 had the pleasure to witness the passage of a law in Congress, improving the condition of every rank in the Navy.

Doctor Kearney was a noble hearted and generous man—he was a kind affectionate husband, a tender parent, most sincere friend, and acquitted himself in all the relations of life, as a christain and polished gentleman.

But it was in the exercise of his profession, either in the hospital, or on board his ship, that he was seen to most advan-

tage—there, his whole time and attention were given to the sick, and no comfort or luxury was spared that could alleviate the sufferings of the patient, or tend to his recovery.

As friends of the deceased, we only join in the common expression of sorrow, at the loss which his family, the public service, and society have sustained in the death of Doctor KEARNEY—and it is therefore

Resolved, That we sympathise with his family and relatives in their bereavement, and that we offer them our heartfelt regret, and most sincere condolence.

Resolved, That when time shall have assuaged the sorrows of his mourning relatives, they may direct his children to contemplate with becoming pride, a father's patriotism, his unsullied reputation, and the bright example of his virtues.

Resolved, That we appreciate his services in co-operating with the Army, in its struggle with the ruthless Seminole of Florida, and in *voluntarily* joining the squadron, now amidst disease and death in the Gulf of Mexico.

Resolved, That we will cherish with grateful recollection the memory of the deceased, as a skilful and efficient officer, a pleasing associate on duty, and as an accomplished gentleman.

Resolved, That these proceedings be signed by the Chairman and Secretary, and published in the papers of this city, and that a copy of them be sent to the Secretary of the Navy, with a request that he forward it to the family of the deceased, and also that a copy of it be sent to the Secretary of War, for Col. James Kearney, of the Topographical Engineers, only surviving brother of the deceased.

CHARLES STEWART, Chairman.

Robert Pettit, Secretary.

U. S. Navy Yard, Philadelphia, Sept. 22d, 1847. *Med. Exam.*

Report on the Influence of Light on the Growth of Plants. By R. HUNT.—The author confirms the conclusions that seeds will not germinate under the influence of light separated from the chemical principle with which it is associated in the sunbeam; that germination being effected, and the first leaves formed, light—the luminous rays become essential to the plant to enable it to secrete the carbon obtained from the carbonic acid of the atmosphere; and that the increased action of the heat rays is essential to insure the production of the reproductive elements of vegetable life. It is found that the chemical principle of the solar rays is more active, relatively to heat

and light, during the spring than at any other period of the year; that as summer advances, this power diminishes, and luminous force increases, while with the autumn both light and actinism are subdued, but the calorific radiations increased. Thus we find the conditions of the light of the seasons varying to suit the necessities of vegetable life. The production of chlorophyl, or the coloring matter of the leaves, was shown to be due to the joint action of light and actinism—the first being necessary to effect the secretion of the carbon, and the latter for the oxidation of this deposited carbon.—*Transactions of Brit. Association.—Jour. Franklin Institute.*

Lectures of M. Agassiz in New York.—We find in the New York Annalist the following notice of Prof. Agassiz, one of the first of living naturalists. We earnestly hope that we shall have the pleasure of hearing him in Louisville during his stay in our country. We envy our brethren in New York the treat afforded them in these lectures.

This eminent naturalist delivered the introductory lecture of his course upon the general history of the animal kingdom, on Friday evening, October 16, to a very crowded audience. Many were obliged to return, having been unable to procure admission. He alluded to the many different points of view in which natural history may be studied; its importance and interest; exhibited the superiority of man over all other animals, by a reference to the natural construction of his body; proved that he was the last of created animals, and his introduction the object of the successive changes in the geological conditions of the earth and in the animal creation; enumerated the various types which exist in nature; noticed the apparent dissimilarity of similar species; explained the striking and important differences between the types as seen in their nervous systems; and concluded a lecture displaying the deepest learning and the noblest generalizations, and which few men in the country other than himself could have delivered, to the delight and instruction of a most respectable and intelligent audience. He has since delivered to a numerous class three lectures of his regular course, in which he has been engaged in pointing out the peculiarities of structure in the class

of the *radiata*, full of the most interesting details and of the most surprising and gratifying proofs of the wisdom and beneficence of the Creator, as displayed in the adaptation of the physical organization of these humble but curious creatures to the wants and purposes of their existence.

M. Agassiz is yet in the prime of life, being but little over forty years of age. He is a little above the common height, of a robust make, has a high, expanded forehead, a pair of well-opened, dark and expressive eyes, and a mouth which is constantly wreathed with a smile of peculiar sweetness and affability. He speaks our language with great accuracy, though with a very decidedly French pronunciation; his voice is loud, clear, and its intonation singularly pleasing. His manner is animated, without being gesticulatory; he aims at no flights of eloquence, but enunciates with the utmost clearness the immense store of knowledge which is so familiar to him, and to him evidently so deeply interesting, and which he contrives easily to make equally so to others. There is about him an earnest honesty of purpose extremely captivating. He is, in the strictest sense of the word, a philosopher. He infers nothing without probability, and asserts nothing without proof. What he knows he knows thoroughly, and tells in the clearest and most intelligible manner. What he does not know, or rather what is not known, he declares with equal candor, and alludes to the results of his own investigations, the fruits of long and untiring industry, with a modesty which is ever the characteristic of true greatness and knowledge. In general society, he has the courtesy of the foreigner, without his usual excess of politeness and compliment. He cheerfully and promptly pours forth the vast amount of knowledge which he has acquired, to all who seek to be informed as to the subjects which have so long and so closely occupied his attention. He is as wholly destitute of hauteur and reserve as he is of garrulity or assumption. He is a truly learned and delightful person, whom none can know without esteem and respect. The influence of his teachings and example cannot fail of being highly beneficial, and has already been felt by many who have attended his lectures—lectures which, we are convinced, will do much to popularize the study of natural history among us. Prof. A. is a man of untiring industry in the pursuit of knowledge. He comes hither to prosecute his favorite study, and, we rejoice to think, will remain in this country for some years. He goes to our markets early every morning in search of new species of his cherished "fishes," which he here meets with abundantly; and can be seen daily, for the greater part

of the morning, busily at work in the room kindly allotted to him in the college, dissecting them, and examining other specimens of natural history which are given to him, explaining and demonstrating, to a group of eager listeners, the peculiarities of their organization, or superintending the labors of the three artists who follow in his suite and are constantly engaged in committing to paper the results of his investigations. Delightful task! The sight of Prof. Agassiz in his studio has made us regret that we are not ourselves a naturalist.

We earnestly recommend those of our intelligent readers who have not yet heard Prof. A. to attend at least one of his lectures. It will not, we are sure, be the last, and we will promise them a rich intellectual treat—delight both in the matter of the lectures and in the manner of their delivery—new sources of wonder and admiration for the wisdom of the Creator, new incentives to study, and a new mode of occupying time both pleasantly and profitably, in repeating some at least of his investigations.

Case of Delirium Tremens Treated by Inhalation of Ether, at the Seamen's Retreat, Staten Island. By Wm. C. Anderson, M.D., Resident Physician.—While the subject of the inhalation of sulphuric ether is attracting the attention of the profession, and much has already been adduced in favor of this new agent as a means of preventing pain in surgical operations—in fact, of divesting the knife of nearly all its terrors, and even parturition of its pangs—very little is known of its powers as a remedial agent.

For this reason, the following case may not be considered as devoid of interest:

J. Miller, act. 53, seaman, attached to the United States ship Savannah, admitted to the hospital October 4th; was paid off about two weeks ago, and has not been sober since. During the last two days had made several attempts at self-destruction; on admission, quite delirious, and so violent that it was necessary to confine him by strapping him to the bedstead. Pulse 104, rather feeble; tongue coated; pupils natural. ℞. Inf. senna comp. ʒiv.

Oct. 5th. Talking and singing all night; bowels not moved. Repeat purgation; lemonade to drink; diet, arrowroot and milk.

5, p. m. Same condition. Continue treatment. ℞. Tr.

opii ʒss, tr. humuli lup. ʒiij. M. Dose, a table spoonful every hour.

Oct. 6th. Condition the same; no sleep; pulse 120. ℞. Emp. vesic. to nape; head shaved; apply ice. Bowels being still confined, administered an enema by means of the long tube; this operated freely. Continue opiate mixture.

9, p. m. Still continues without sleep, and continually raving.

Oct. 7th. Delirium continued all night without intermission; pulse weaker.

12 o'clock, m. Skin cold; pupils contracted. ℞. Milk punch; omit ice; soup diet.

10 minutes past 9, p. m. His condition is altered for the worse; body bathed in a cold sweat, which about the head and face is quite profuse; pupils contracted to the size of pinholes; refuses to take his medicine or drinks, which, when put into his mouth by force, he spits out again, without swallowing a particle.

Such being the condition of things, it was decided to administer the ether, which was done by means of a hollow sponge, supplied from the outside, and covering the whole face. At first he resisted; but although there was no possibility of making him swallow medicines, there was no resisting inhalation. After four minutes' application, he became perfectly passive, and commenced drawing long and deep inspirations, with stertor and tracheal rale; pupils still contracted, and balls turned upwards. The sponge was then removed during five minutes, etherization continuing during that time, when it gradually passed off, the breathing becoming more natural, and a return of restlessness and delirium took place. The sponge was reapplied, and after four or five minutes the effects again became manifest, and continued for from eight to ten minutes; and when they passed off, he remained much more calm, although not intelligent nor seemingly inclined to sleep. Another application was made, with the same results; he no longer resisted the inhalation, but inspired with eagerness when the sponge was applied, and after recovering from the stupor, did not refuse his drinks. He dozed occasionally for four hours; took one pill of morphine, gr. ss., which had been left with the attendants to be given him if he did not sleep, and fell asleep shortly after, and did not awake for six hours, when he was found to be perfectly rational, saying that he felt himself quite well.

This case, when the ether was resorted to, was certainly a most unpromising one; but whether the induction of sleep

must be attributed to this agent, or the narcotics previously taken, or the pill of morphine taken afterwards, may admit of doubt; but that the patient was quieted, and from being violent, resisting and furious, was rendered quiescent, passive and obedient, there can be no question.—*New York Annalist.*

On some Recent and Remarkable Examples of the Protection Afforded by Metallic Conductors against Heavy Strokes of Lightning. By Sir W. S. Harris.—The possibility of guarding buildings and other structures against the destructive effects of lightning has been made a great question in practical science, from the time of Franklin to the present day; and it is of considerable public importance, seeing the frequent damage which occurs to our beautiful churches and other edifices by strokes of lightning, to bring this question completely under the dominion of induction, observation and experiment. The general principles which Sir W. S. Harris submitted as deducible from the inquiries to which he alluded are these: If we imagine a ship or building to consist altogether of metallic substances, it would certainly be secure from any damage by lightning, and for this simple reason, that what we call lightning is the result of the electrical agency forcing a path through resisting matter, such as the air, and extricating, with explosive and expansive force, both light and heat in its course. When, on the contrary, it falls upon comparatively nonresisting bodies, such as the metals, then this form of lightning vanishes, and the discharge assumes, if the metallic body be sufficiently capacious, the form of a comparatively quiescent current. Our object should be, therefore, in defending any building or ship from lightning, to bring the general mass so far as possible into that passive or comparatively nonresisting state it would have, supposing it a mass of metal. This is, in fact, the single and simple condition of such an application, without any reference whatever to assumed forces of attraction or peculiar specific powers manifested by certain bodies for the matter of lightning, and which really do not exist. This simple principle, by a careful mechanical arrangement calculated to render it practical and applicable to all the duties which the general structure of a ship, together with its masts, has to perform, is now universally carried out in the navy with the most perfect success; so that damage by lightning in the vessels so fitted has for the last fifteen years quite ceased. The

masts are made completely conducting by capacious plates of copper reaching from the highest points to the keel, and are tied into one general connection with all the great metallic masses employed in the construction of the hull, and united, by the large bolts of copper passing through the keel and sides, with the copper expanded over the bottom and with the sea. It is quite impossible that a discharge of lightning can fall on the vessel in any place, and not be at once transmitted safely by the conductors, not under the form of lightning, but under the form of a current without explosion. Sir W. S. Harris then referred to some remarkable cases.—*Transactions of the British Association.—Jour. Franklin Institute.*

On the time required to produce Death by a fatal dose of Medicinal Hydrocyanic Acid. By S. C. Sewell, M. D., Lecturer on Materia Medica, University M'Gill College, etc., etc.—My attention has been attracted to this subject in consequence of a fatal case having occurred in my practice lately. A *resumé* of the history of some of the more remarkable instances of fatal, and nearly fatal cases on record, will be necessary to elucidate the interest attached to this point. In the case of the seven Paris epileptics (1828), where a very concentrated acid was used (the half-ounce potion contained 18½ grs. pure acid), some lingered as long as twelve minutes before life was entirely extinct; but the first who swallowed it was dead in three minutes. The first time that the life of a prisoner depended upon a solution of the question under consideration, occurred at the Lancaster Assizes, held in April, 1829, when Freeman, an apothecary's apprentice, was arraigned for the murder of Judith Burwell, his master's servant. She was pregnant by him, and was found one morning dead in her bed. An ounce phial containing three drachms of prussic acid, corked, and wrapt in paper, was found alongside of her. The body was in a composed position, the arms folded over the trunk, and the bedclothes drawn smoothly up to the chin. Had the deceased time to perform all these actions after drinking the poison out the narrow-necked phial? Messrs. Macaulay, Paget, and others, in consequence of experiments performed on the lower animals, decided in the negative. Dr. Christison, in the first edition of his work on Poisons, said that his experiments accorded with theirs; but, in the second, that it was probable that prussic acid frequent-

ly took a longer time to act than was generally supposed, and that the probability in this case was that it had done so, and that it had been taken voluntarily by the deceased, because the prisoner had to pass through the room in which his master and mistress slept, to gain access to the girl's room, and must have opened and shut three doors without noise. My opinion is, that she took it voluntarily to produce abortion, for which she had made preparations the night before, and that, if Freeman had anything to do with it, he provided her, for his own purposes, with the poison, telling her that it would cause miscarriage. Mrs. Latten died in twelve minutes from taking a drachm and a half of medicinal acid. In Dr. Geoghegan's case, the patient took two drachms of prussic acid (Dub. Pharm.), and experienced no effect for *two minutes*. He subsequently fell into violent convulsions, and was saved by applying sesquicarbonate of ammonia to the nostrils. In the July number of the London Medical Gazette, is quoted Mr. Godfrey's case of "a man 44 years of age, who, after taking half an ounce of Scheele's acid, walked ten paces to the head of the stairs, descended the steps, seventeen in number, and then proceeded, rather quickly, to a druggist's shop, forty-five paces distant, where he had procured the acid, entering the shop in his usual slow and easy manner, and asking for 'more of that prussic acid,' before he became evidently affected by the poison which he had swallowed. In this instance, at least *five minutes* must have elapsed, from the time of swallowing the poison, before death took place." This case is quoted as introductory to the report of a coroner's inquest, which took place at Worcester on the body of Mr. Benjamin Shepherd. The substance is as follows:—Mr. S. went into Mr. Stringer's (druggist) shop, and purchased ℥ij "prussic acid, Scheele's strength, and, asking if any one was in the back room, and being answered in the negative, walked in there, saying to the druggist, "I want a word with you." Stringer followed him within *two minutes*, and found him sitting on the sofa, and the phial of prussic acid empty on the table before him. Stringer said, "good God, Shepherd, you have not been taking that! Deceased replied, smiling, "No, no, it is all right—take no notice—give me your hand old fellow." Witness went up to him and the deceased added, "God bless you—its all right—take no notice." Witness went for Mr. Griffith, surgeon, but, not finding him, returned with Mr. Pierpont, who with witness, tried to administer *ammonia as an antidote* to the prussic acid, and a futile attempt was made to produce vomiting. The stomach pump was sent

for, but arrived after death had taken place. Before leaving this case, I must comment upon the means employed to save Mr. Shepherd. Mr. Pierpont and Mr. Stringer should have known that, by administering ammonia, they would have formed the hydrocyanate of ammonia, nearly, if not quite, as energetic a poison as the prussic acid; and that ammonia or the sesquicarbonate applied to the nostrils, acts usefully by stimulating the nervous system, and the heart's action, until the poison has exhausted its violence, and not as an antidote. Secondly, attending on vomiting, and the stomach pump was doubly useless, inasmuch as had they evacuated the stomach, they would have been no nearer saving their patient, and they thereby lost precious time which might have been employed in using more efficacious means. As an antidote, a solution of the sulphate of iron, or a dilution of the Tr. Fer. Mur. would have been as effectual as an antidote can be in a case of poisoning by this acid. The application of chlorine water or sesquicarb. ammonia to the nostrils, and cold affusion to the spine, would have comprised all that is known to be of value in the treatment of such unfortunate cases.

My patient had been for a long time hypochondriacal, and had frequently threatened to destroy himself. During the day of the fatal event, he repeatedly told his relations that he would be dead by nine that night; but, as he had frequently said the same thing, no attention was paid to it. At six in the evening, he purchased an ounce phial of Prussic acid, Scheele's strength, and on his road home, shewed it to several persons, saying that he would soon be dead, and invited them to his funeral. At seven in the evening, he took leave of his friends in a gay, smiling manner, and going up to his room, sent for Mrs. ——, shewed her the poison, and said that he would be dead in two minutes. She snatched at the phial, but he drew it playfully away, turned her out of the room, and locked the door. She, thinking that he was jesting, as he had frequently done the same thing before, went to her own house, next door, which communicated through the yards. About a minute after, he unlocked the door and cried out, "Come to me quick, I am dying." A relative, very much alarmed, called to the servant man in the yard, who ran up stairs and found him lying on his back on the sofa with his legs crossed, insensible, and snoring. In a few moments, Mrs. —— arrived and found him in the same state. I arrived there in twenty minutes. He was then dead, and presented the appearance of profound slumber; the legs crossed, the arms by his side, and eyelids firmly closed. I applied Liq.

Am. Fortissim. (a strength made for portability by manufacturing chemists) to the nostrils, and cold affusion to the occiput and spine. I considered him dead, but employed the remedies in the event of a possibility of there being some remaining sparks of life. The eyes were much more brilliant than during his life, and continued so the next day; the face was livid, and the lips very blue; the muscles were all flaccid, and exhibited no tonicity, except a little in the legs at the end of twenty hours. No sectio was permitted. The phial, containing a drachm of prussic acid, was on a table, ten feet from the sofa, with a wine glass upset and broken alongside, done by the deceased in the hurry of putting it on the table. After having employed my remedies, I applied my nose to the deceased's mouth, but could detect no smell of prussic acid. The remaining acid was thrown out by the servant, so that I could not ascertain its strength; but I feel certain that it was acid of the strength of over three per cent., which is the usual strength of medicinal acid imported into this country; and, since the use of ground glass stoppled phials to put it up in, it always reaches here unimpaired in quality. In the present case, seven drachms of medicinal acid, containing about twenty-one grains of pure acid, were swallowed. The friends think about a minute elapsed before he unlocked the door; but more must have passed, because Mrs. —— had time to go to her own house and busy herself in household affairs before the alarm was given. It is probable that he did not give the alarm until he found the acid working on him; at any rate, he walked from the table to the door, and unlocked it after taking the poison, called for assistance, and then walking to the sofa, stretched himself on it. *He had no convulsions.* Previous to the occurrence of the above cases, it has been held that, where prussic acid causes death slowly, convulsions come on after a notable interval, and where it acts speedily, no convulsions ensue, but death follows with such rapidity as to allow of none but the *simplest* actions, and those performed with rapidity. From a review of the two cases extracted from the London Medical Gazette, we must allow the truth of the following inferences as to the action of hydrocyanic acid on the human body:

1st. Hydrocyanic acid is modified in its operation on the human frame, both as to time and phenomena, by the idiosyncrasy of the individual.

2d. That it *not unfrequently* is slow in manifesting its poisonous influence, allowing time for the performance of va-

rious complicated actions, and yet may destroy life without producing convulsions.

3d. That Judith Burwell could have performed the various actions attributed to her after swallowing the prussic acid, and have been found in the position stated by the witnesses in the trial of Freeman.—*British American Jour. of Medical and Physical Science.*

Montreal, September, 1847.

Sulphur Rains. By H. Croft, Professor of Chemistry, King's College, Toronto.—In the last number of your Journal, I noticed a communication, signed J. H. L., on the subject of the so-called sulphur rains, which have been seen in Toronto during the last few years. Your correspondent makes a very useful remark with regard to the periodical return of the phenomenon; but at the end of the paper he states that the yellow deposit is supposed to consist of pollen, and that further observations are required to confirm this fact.

Perhaps the few following remarks on some of the most important investigations on this subject may not be altogether uninteresting to some of your readers, as explaining a phenomenon so frequently observable in this country.

It was believed in former, and even in comparatively recent times, that the yellow substance often found on water after heavy rains, consisted of flowers of sulphur; but Scheuchzer observed that the substance which fell at Zurich in 1677 and 1653, could not be this body, as on being burnt it did not give off any sulphurous odor. Scheuchzer ascribed the substance to the pollen of the red pine; Elsholtz to that of the Lycopodium clavatum. But Schemeider has shown that it may be derived from a variety of plants; he believes that in March and April it may be ascribed to the alders and hazels; in May and June, to the pines, junipers, and birch; and in July, August, and September, to Lycopodium clavatum, Typha angustifolia, and the different kinds of Equisetum. It has been noticed, that near forests through which a strong wind is blowing, that portion of the land lying in the direction of the wind became covered with the yellow powder. In 1761, there was a heavy fall of it at Bordeaux, covering the ground to the depth of two lines. The members of the Academy of Sciences of Paris convinced themselves that the deposit consisted of the pollen of several species of pine.

A Sulphur rain, (or rather pollen rain) was observed at Co-

penhagen in 1804. The deposit consisted of the pollen of Lycopodium.

No real sulphur rain has yet been observed, although it might possibly occur in the neighborhood of volcanoes.

To the above extracts, from Kauntz' Meteorology, vol. 3, I would add a few words with regard to the yellow powder which fell in Toronto this summer. Having examined it under a powerful microscope, I convinced myself of its being the pollen of pines. I found that the figures corresponded exactly with Bischoff's plates, representing the pollen of the Pinus strobus (white pine.)—*Bischoff's Terminologie Table* xxxiv.

As is well known, the pollen grains are, in general, simple in form; but it occasionally happens that two or more grow together, and thus produce complicated forms. Such is more particularly the case with pollen grains of the Abietinæ, which consist of a large granule, with two vesicular formations attached to it at each end. These abortive pollen grains may be removed by soaking in oil of turpentine, and then rolling between glass plates; they do not appear to have any contents, but to consist of a simple membrane, covered with a kind of net-work, while the centre granule is perfect. In the early stages of the formation of the pollen, all the granules are equal in size, and of the same structure, and as they increase, one is perfected at the expense of the other two, which, however, remain attached to it.—*Megan's Phlazon Physiologie. book* 3.

The yellow substance, therefore, which was observed at Toronto, consisted of the pollen of the Pinus strobus, (white pine) or Pinus resinosa, (red pine) mixed probably with small granules of the pollen of other plants.—*British Am. Jour.*

Toronto, August 16, 1847.

Ledoyen's Disinfecting Fluid.—This article appears to be exciting considerable attention abroad. We gather from various journals, and particularly the *Pharmaceutical Journal*, for August, 1847, that M. Ledoyen, the discoverer, claims for it all the efficacy usually attributed to chloride of lime, as a disinfectant, without the disadvantage of causing the evolution of any deleterious compound, and that night soil or other refuse, might, by means of this fluid, be entirely deprived of its noxious odour, at the same time, that its properties as a manure would be rather improved than deteriorated. It was also described as being a certain specific against contagion, and an unexpensive compound, easily procurable.

M. Ledoyen refused to disclose his secret, on the ground that in doing so, he would deprive himself of the chance of any pecuniary advantage, although he at the same time offered to submit the liquid to experiment before any tribunal.

M. Ledoyen, however, in conjunction with Col. Calvert, succeeded in introducing the fluid to the notice of the government; a parliamentary inquiry ensued, and a report was published. During the whole of these proceedings, the secret was kept so inviolate, that none of the fluid could be obtained, except on a promise that it should not be chemically examined, and we could not even obtain it from the Fever Hospital, where it had been in use for many weeks, because we declined to take the pledge. A small quantity, however, was recently furnished from another source without the pledge.

It is now generally known that the fluid is a solution of nitrate of lead, which, like other salts of lead, decomposes sulphuretted hydrogen and hydrosulphate of ammonia, thus destroying the smell and producing innoxious compounds. That the salts of lead possess this property is known to every student in chemistry, and these salts are familiar to the profession as applications in the form of lotion and for other purposes. We have known Mr. Ure prescribe a solution of nitrate of lead as a lotion for foul ulcers two or three years ago.

It therefore requires no further proof to establish the fact, that the salts of lead are adapted as decomposing agents, for neutralizing animal or vegetable effluvia, in which sulphuretted hydrogen is the active ingredient. But it remains to be proved that the fluid in question is a specific against the miasma of fever, which, in the opinion of some of our best chemical and medical authorities, is distinct from sulphuretted hydogen, although generally a concomitant.

On the supposition that sulphuretted hydrogen is the cause of fever, it might be expected that the students in a chemical laboratory, where the air is constantly contaminated with the gas, would be particularly liable to febrile attacks. This, however, is not found to be the case.

It appears that M. Ledoyen does not contemplate securing to himself by patent the exclusive right to sell his fluid, but claims from the government, such reward as may appear on investigation to be due to him, as the discoverer of a disinfecting agent of great importance to the health and welfare of mankind. A similar application was made to the French government, but the grant was refused.—*Pharm. Journ.*, August 1847. T. R. B.

THE WESTERN JOURNAL.

NEW SERIES.—VOL. VIII.—NO. VI.

LOUISVILLE, DECEMBER 1, 1847.

TO SUBSCRIBERS, READERS, AND CONTRIBUTORS.

The present number closes our second series, of eight volumes, and with the opening of the year 1848, we shall commence a new one—the third. The propriety of this succession of series, or *octades*, to coin a word, for which we have the same warrant as the authors of hexade and decade, will be at once admitted, by all who reflect on the condition of society, in the new countries to which we look for subscribers. Daily increasing in population, new physicians, to meet the augmenting demand, are daily entering the profession; and to all such, it must be desirable, in subscribing for the Journal, to begin with a series. That many, therefore, will encourage our publishers, on new year's day, 1848, we hope, and even venture to expect.

To those who have favored us with contributions for the series, now concluding, we cordially return our thanks. Many of their papers have been noticed in other journals, and we trust they will not forget us in future. Those who have not hitherto recorded themselves on our pages, we as respectfully invite to come forward and do it. No well written paper was ever finished without leaving its author a better man, intellectually, than he was at its beginning. The primary and paramount object of a medical journal is the publication of medical and surgical experience; the diversities of which, in our widely extended country, must of course be very great. To present this experience, it is not necessary to write essays or dissertations. Plain historical narrative may embody the whole, and hundreds who might hesitate as to the former, are well qualified for

the latter method of writing. We hope that many of them will come to our aid, and while they advance their own fame, elevate the character of our Western profession, and promote the health and happiness of society.

To our brethren on the Lakes and the Gulf of Mexico, we would address a special request. Of the ship fever which has prevailed along the shores of the former, and, of it, and yellow fever, which has infested the coasts of the latter, throughout the past summer and autumn, we desire to obtain full and authentic accounts;—such accounts, as those who have been amidst them, and those only, can give. Shall not this desire be gratified? We see no difficulty in the way, and know of nothing that will be read with deeper interest.

We must, also, speak a word to the physicians and surgeons of the West and South-west, who have served, or are now serving, in the armies which have marched into Mexico. They must not only have seen a vast number of surgical operations, but many of the diseases which affect all armies in hot climates. We trust their experience will not be lost, and that we shall, in due time, be permitted to disseminate much of it abroad.

Arrangements have been made by which we shall continue to receive monthly communications from a correspondent in Paris.

As to our own future efforts, we dare not speak, having a deep consciousness that they have not hitherto been as great as might have been expected of us. Nevertheless, we now feel that we shall enter on our third series with renewed resolution, and that, if sustained and encouraged by our correspondents, we shall be able to render it more worthy of the medical public than the previous series have been.

PROPOSED TREATISE ON TYPHOID AND TYPHUS FEVER.

Our friend Dr. Sutton, of Georgetown, Kentucky, as we learn, has it in contemplation to publish a historical and practical treatise on these fevers, as they have prevailed in the interior of this State; and, especially, in Scott and the adjoining counties, where he has seen and treated them; and to some extent observed their pathological anatomy. Dr. Sutton is already favorably known to our readers, by his contributions to this Journal. We cannot doubt that his proposed work will be a valuable contribution to our indigenous literature, and hope soon to hear of its being committed to the press.

EPIDEMIC CHOLERA.

It seems now quite certain that this pestilence is again advancing westwardly; and that, too, nearly in the path it traveled before. It has actually entered Europe, by the eastern edge, and will no doubt hold its way to and through the Atlantic kingdoms of the continent; thence to invade America. Should it reach Ireland, before the destitute people of that country have recovered from the famine they have just passed through, its ravages would doubtless prove appalling. In our next number we propose to give a condensed summary of the facts indicating its present march.

ALLEGED EXTIRPATION OF THE LIVER.

We have been shown, by a friend, a letter from Dr. Robert Thompson, of Ohio, which states, that on the 10th ult. (Nov.) he extirpated the enlarged LIVER of a woman, of Licking county, Ohio; and, that a day and a half after the operation, the patient was doing well! We of course supposed the letter to be a forgery; but a few days afterwards, the fact was announced in the newspapers of that quarter, and, subsequently, the gentleman, to whom we have referred, received, as he informs us, a second letter, dated *eight* days after the operation, when the patient was still alive. In one of the newspaper accounts it is stated, that the tumor, "independent of the fluid it contained, weighed 29½ pounds. It *proved* to be the whole liver, which had undergone degeneration and had become filled with hydatids." From the word which we have underscored, we infer, that before and during the operation, the tumor was not regarded as consisting of, or comprising, the liver; and, therefore, that the operator and the respectable gentleman who assisted him did not plan the extirpation of that organ. But *was* it extirpated? The decision that it was, seems to have been made from an inspection of the mass after it was taken out, and if the gall bladder were in it, the conclusion must be received; but no other evidence would establish the fact, seeing that the structure was morbid and filled with hydatids. We may presume, then, that the gentlemen who made the decision had the proof to which we have referred. Now, after discovering that the liver had been, inadvertently, removed, on what ground could they expect the recovery of the patient? What anatomist has yet detected the veins by which the blood of the cæliac and superior mesenteric arteries could find its way back to the vena cava? And if it could not return, how could death be averted? But if a venous anastomosis existed, which might supply the place of the vena portæ and hepatic veins, what surgeon would expect to see them unite,

and become obliterated, under the ligature? Finally, who would look for a union of the sides of the common gall duct, so as to prevent regurgitation from the duodenum into the peritoneal sac? With the thoughts suggested by these questions, we may well be surprised that the patient should be alive eight days after the operation. This, if the organ really were extirpated, may, perhaps, be explained by a reference to the entire emaciation and consequent anemic condition in which the patient was, as we have been informed, at the time of the operation.

For ourselves, however, until shown convincing evidence that the excised mass was, or included, the liver, we shall regard it of a different kind, and believe that the organ, in a state of atrophy, from the pressure of the tumor, was pushed far up in the concave of the diaphragm, to which it might morbidly adhere, and thus escaped the knife of the intrepid operator. If not hepatic, the tumor might have been encephaloid or ovarian, most likely the latter; for, as we learn from the friend to whom we have already referred, the uterus, as he has been informed, was enlarged, hardened, pressed low into the pelvis, and partially retroverted. We shall keep this case in view, and give our readers a further account of it in our next number.

UNIVERSITY OF LOUISVILLE.

The classes in both the Law and Medical Department of the University of Louisville are larger than they were last winter. The annual circular, to be issued the first of January, will exhibit remarkable prosperity in the institution. We may say, in one word, that the spacious rooms in the Medical College are full.

BOOKS RECEIVED.

From the publishers, Messrs. Grigg & Elliott, we have received a copy of Woos' Practice; and from Messrs. Lea & Blanchard, copies of Bartlett on Fever, and Carpenter's Physiology, all of which will be noticed more at length in an early number. For sale at the book stores of Mrs. Maxwell and Mr. Prescott, in this city.

ODD NUMBERS WANTED.

The publishers of this Journal will pay fifty cents each for the numbers for April, October, and December, 1845. Any one having those numbers to spare, will oblige the publishers by remitting them forthwith by mail.

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April 1—6m

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Letters on business, to be addressed, postage paid, to the publishers.

January, 1844. PRENTICE & WEISSINGER.

UNIVERSITY OF LOUISVILLE,

MEDICAL DEPARTMENT.

(LATE MEDICAL INSTITUTE OF LOUISVILLE.)

The Lectures in this Department will commence on the first Monday in November, and terminate on the last of February.

JEDEDIAH COBB, M.D., ...	Professor of Anatomy and Dean of the Facalty.
CHARLES CALDWELL, M.D., . . .	Professor of the Institutes of Medicine and Medical Jurisprudence.
SAMUEL D. GROSS, M.D., ...	Professor of Surgery.
HENRY MILLER, M.D., ...	Professor of Obstetrics and the Diseases of Women and Children.
CHARLES WILKINS SHORT, M.D.,	Professor of Materia Medica and Medical Botany.
LUNSFORD PITTS YANDELL, M.D.,	Professor of Chemistry and Pharmacy.
DANIEL DRAKE, M.D	Professor of Pathology and Practice of Medicine.
GEORGE W. BAYLESS, M.D.	Demonstrator of Anatomy and Dissector in Pathological Anatomy.

The fee of admittance to the Lectures of each Professor is $15, payable invariaby in advance. Matriculation and Library fee together $5. Graduation fee $25. Practical Anatomy and Dissections $10.

Clinical instruction is given twice a week at the Louisville Marine Hospital. Large appropriations have been made since the close of the last session for the increase of the library, and the books purchased are expected before the beginning of autumn.

☞Good boarding can be procured at from $2 50 to $3 per week.

J. COBB, M.D., Dean of Medical Faculty.

August 1, 1847.-3t.

JEFFERSON MEDICAL COLLEGE.

SESSION OF 1847-8.

The regular Course of Lectures will commence on Monday, the first of November.

ROBLEY DUNGLISON, M.D.,	Professor of Institutes of Medicine, &c.
ROBERT M. HUSTON, M.D.,	Prof. of Materia Medica and Gen. Therapeutics.
JOSEPH PANCOAST, M.D.,	Prof. of Gen., Descriptive, and Surg. Anatomy.
JOHN K. MITCHELL, M.D.,	Prof. of Practice of Medicine.
THOMAS D. MÜTTER, M. D.,	Prof. of Institutes and Practice of Surgery.
CHARLES E. MEIGS, M.D.,	Prof. of Obstetrics and Diseases of Women and Children.
FRANKLIN BACHE, M.D.,	Prof. of Chemistry.
ELLERSLIE WALLACE, M.D.,	Demonstrator of Anatomy.

Every Wednesday and Saturday in the month of October, and during the Course, Medical and Surgical cases are investigated, prescribed for, and lectured on before the class. During the past year eight hundred cases were treated, and two hundred operated on. The Clinical Lectures are so arranged as to permit the student, should he desire it, to attend the Medical and Surgical practice and Lectures at the Pennsylvania Hospital. After the 1st of October, the dissecting rooms of the College will be open under the direction of the Professor of Anatomy and the Demonstrator.

The number of Students during the last Session was 493; and of graduates 181.

R. M. HUSTON, M. D.,

August 1847.—t4 Dean of the Faculty, No. 1 Girard Street.

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MEDICAL DEPARTMENT,

SESSION OF 1847-48.

The Medical Lectures will commence on Monday, the 18th of October, and be continued under the following arrangement, to the end of March ensuing.

Theory and Practice of Medicine,	by NATHANIEL CHAPMAN, M. D.
Chemistry,	
Surgery,	WILLIAM GIBSON, M. D.
Anatomy,	WILLIAM E. HORNER, M. D.
Institutes of Medicine,	SAMUEL JACKSON, M. D.
Materia Medica and Pharmacy,	GEORGE B. WOOD, M. D.
Obstetrics and the Diseases of Women and Children,	HUGH L. HODGE, M. D.

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The rooms for Practical Anatomy will be open from October 1st to the end of March ensuing. JOHN NEILL, M. D., Demonstrator.

Preliminary Lectures by the several members of the Faculty, will be delivered daily from the 4th to the 16th of October, inclusive.

Amount of Fees for Lectures in the University,	$105
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Hospital Fee,	10
Practical Anatomy,	10
Graduating Fee,	30

The Commencement will take place at the usual period, early in April.

The vacancy in the Chair of Chemistry, will be filled in time for the opening of the Session.

W. E. HORNER, M. D.,
Dean of the Medical Faculty.

386 Chestnut Street, above Thirteenth, opposite the U. S. Mint, Philadelphia. Sept 1847—2t

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W. E. HORNER, M. D.,
Dean of the Medical Faculty.

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BALTIMORE COLLEGE OF DENTAL SURGERY,

SESSION OF 1847—8.

The Annual Lectures in this Institution commence the 1st Monday in November and end the latter part of February.

CHAPIN A. HARRIS, A.M., M.D., Prof. of the Principles and Practice of Dental Surgery.

THOS E. BOND, Jr., A.M., M.D, Prof. of Special Pathology and Therapeutics.

W. R. HANDY, M.D., Prof. of Anatomy and Physiology.

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CYRENEUS O. CONE, D.D.S., Demonstrator of Mechanical Dentistry.

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Sept 1847—n2 W. R. HANDY, Dean.

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COLLEGE OF PHYSICIANS AND SURGEONS

OF THE

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The Forty-First Session of the College will be commenced on Monday, 18th October, 1847, and continued until the second Thursday in March, 1848.

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JOSEPH M. SMITH, M. D., Professor of the Theory and Practice of Medicine and Clinical Medicine.

JOHN B. BECK, M. D., Professor of Materia Medica and Medical Jurisprudence.

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In addition to the regular Course, and not interfering with it, a Course of Lectures will be commenced on Monday, 27th September, and continued until 18th October, viz.:

Hygeine,	by	Dr. Smith.
Medical Botany,	"	Dr. Torrey.
Hernia,	"	Dr. Watts.
Treatment of Infantile Diseases,	"	Dr. Gilman.
Physiology of the Blood,	"	Dr. Clark.

This Course will be *free* to the *Matriculated* Students of the College.

R. WATTS, M.D., Secretary to the Faculty.

College of Physicians and Surgeons,
67 Crosby street, New-York. Sept. 1847—2m

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January, 1844. PRENTICE & WEISSINGER.

TO OUR SUBSCRIBERS.—Another half year is gone, and a large sum is still due us for this Journal. We hope the *delinquent* subscribers will listen to the voice of conscience within them, and remit without delay.

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JEDEDIAH COBB, M.D., ...	Professor of Anatomy and Dean of the Faculty.
CHARLES CALDWELL, M.D., ...	Professor of the Institutes of Medicine and Medical Jurisprudence.
SAMUEL D. GROSS, M.D., ...	Professor of Surgery.
HENRY MILLER, M.D., ...	Professor of Obstetrics and the Diseases of Women and Children.
CHARLES WILKINS SHORT, M.D.,	Professor of Materia Medica and Medical Botany.
LUNSFORD PITTS YANDELL, M.D.,	Professor of Chemistry and Pharmacy.
DANIEL DRAKE, M.D	Professor of Pathology and Practice of Medicine.
GEORGE W. BAYLESS, M.D.	Demonstrator of Anatomy and Dissector in Pathological Anatomy.

The fee of admittance to the Lectures of each Professor is $15, payable in variaby in advance. Matriculation and Library fee together $5. Graduation fee $25. Practical Anatomy and Dissections $10.

Clinical instruction is given twice a week at the Louisville Marine Hospital. Large appropriations have been made since the close of the last session for the increase of the library, and the books purchased are expected before the beginning of autmnn.

☞Good boarding can be procured at from $2 50 to $3 per week.

J. COBB, M.D., Dean of Medical Faculty.

August 1, 1847.-3t.

JEFFERSON MEDICAL COLLEGE.

SESSION OF 1847-8.

The regular Course of Lectures will commence on Monday, the first of November.

ROBLEY DUNGLISON, M.D.,	Professor of Institutes of Medicine, &c.
ROBERT M. HUSTON, M.D.,	Prof. of Materia Medica and Gen. Therapeutics.
JOSEPH PANCOAST, M.D.,	Prof. of Gen., Descriptive, and Surg. Anatomy.
JOHN K. MITCHELL, M.D.,	Prof. of Practice of Medicine.
THOMAS D. MÜTTER, M. D.,	Prof. of Institutes and Practice of Surgery.
CHARLES E. MEIGS, M.D.,	Prof. of Obstetrics and Diseases of Women and Children.
FRANKLIN BACHE, M.D.,	Prof. of Chemistry.
ELLERSLIE WALLACE, M.D.,	Demonstrator of Anatomy.

Every Wednesday and Saturday in the month of October, and during the Course, Medical and Surgical cases are investigated, prescribed for, and lectured on before the class. During the past year eight hundred cases were treated, and two hundred operated on. The Clinical Lectures are so arranged as to permit the student, should he desire it, to attend the Medical and Surgical practice and Lectures at the Pennsylvania Hospital. After the 1st of October, the dissecting rooms of the College will be open under the direction of the Professor of Anatomy and the Demonstrator.

The number of Students during the last Session was 493; and of graduates 181.

R. M. HUSTON, M. D.,

August 1847.—14 Dean of the Faculty, No. 1 Girard Street.

THE

WESTERN JOURNAL

OF

MEDICINE AND SURGERY:

EDITED BY

DANIEL DRAKE, M. D.

AND

LUNSFORD P. YANDELL, M. D.

PROFESSORS IN THE UNIVERSITY OF LOUISVILLE,

AND

THOMAS W. COLESCOTT, M. D.

NO. XCV.—NOVEMBER, 1847.

NEW SERIES.

VOL. VIII.—NO. V.

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PROPRIETORS AND PRINTERS.

1847.

[POSTAGE 6¼ CENTS.]

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R. M. HUSTON, M. D.,
August 1847.—t4 Dean of the Faculty, No. 1 Girard Street.

BALTIMORE COLLEGE OF DENTAL SURGERY,

SESSION OF 1847—8.

The Annual Lectures in this Institution commence the 1st Monday in November and end the latter part of February.

CHAPIN A. HARRIS, A.M., M.D., Prof. of the Principles and Practice of Dental Surgery.
THOS. E. BOND, Jr., A.M., M.D, Prof. of Special Pathology and Therapeutics.
W. R. HANDY, M.D., Prof. of Anatomy and Physiology.
AMOS WESTCOTT, A.M., M.D., Prof. of Operative and Mechanical Dentistry.
CYRENEUS O. CONE, D.D.S., Demonstrator of Mechanical Dentistry.

The College is furnished with every facility for a *thorough practical* as well as theoretical education; and each student is required to devote from 4 to 6 hours of every day in the Mechanical and Surgical departments.

Sept 1847—n2 W. R. HANDY, Dean.

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Sept. 1847. PRENTICE & WEISSINGER.

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The WESTERN JOURNAL OF MEDICINE and SURGERY is published monthly by the undersigned, at the corner of Main and Fifth streets, Louisville, at $5 per annum, payable in advance. Each number contains 96 pages, making two volumes in the year of more than 550 pages each.

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Letters on business, to be addressed, postage paid, to the publishers.

January, 1844. PRENTICE & WEISSINGER.

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To Subscribers. The present volume of this Journal closes with this number. We trust that subscribers in arrears will at once remit, and that those who have paid for 1847 will forward the subscription for 1848. Subscribers will perceive from the published lists that our receipts have been very light, notwithstanding that we have paid large sums for contributions and correspondence. We hope that they will now respond by prompt and liberal remittances.

PRENTICE & WEISSINGER.

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